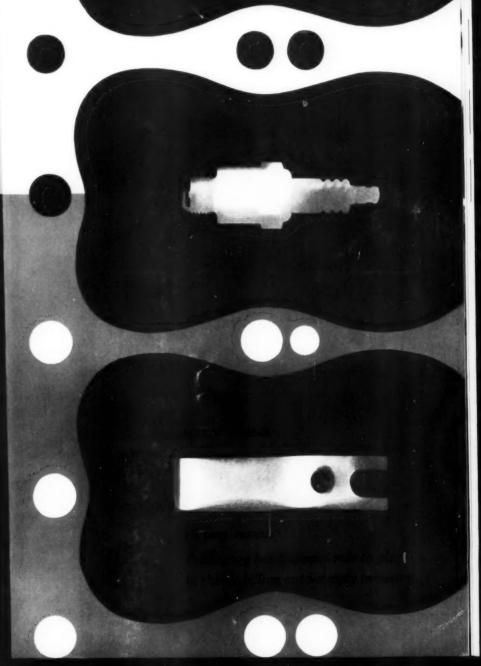
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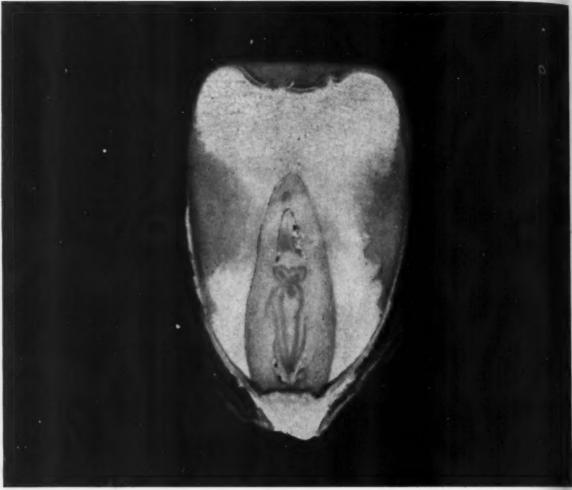


Illustration Courtesy of Corn Industries Research Foundation, Im.

### This is a magnified kernel of corn

Its tight, tough covering which is one of nature's finest protective packaging jobs has been cut away to reveal the truly wonderful things inside.

As the largest single industrial user of corn the wet milling industry extracts four billion pounds of starch; a million tons of livestock feed in the form of gluten, protein and fiber; and a quarter of a billion pounds of corn oil. Corn is the largest U. S. agricultural crop. It now exceeds three billion bushels of kernels annually.

About 60% of a kernel of corn is starch. Corn starch products lead all other starches as a base for pastes, glues, gums and dextrines used in packaging. National is a major producer of these starch specialties through chemistry—developed by a highly specialized research program.



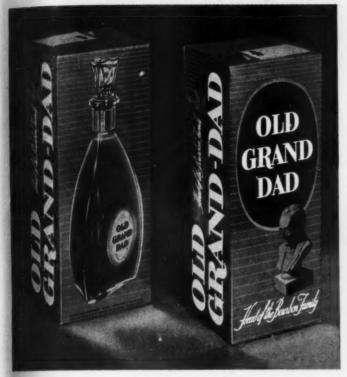
NATIONAL STARCH PRODUCTS INC., 270 MADISON AVE., NEW YORK 16, N. Y.



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### Showcase Specials by Gair



ENO E CLATE CHO E CLATE CHO E CALATER STRINGS FOR THE CONTROL OF T

A STICKY BUSINESS NO LONGER. Curtiss' chocolate covered jelly strings get special treatment in their new Gair carton.

Inside story here is Gair's chocolate glassine board. The glassine is laminated to a white Gaircote news back board that brightens the eye appeal of Curtiss Candy Company's graphic design. Carton is reverse tuck style with acetate window.

If yours is a hard-to-handle product, why not find out what Gair cartons made from our special boxboard can do. No obligation, of course.

**OLD BOURBON-NEW LOOK.** Gair-Reynolds Foiline, gravure printed by Gair, adds a new luster to this gift carton for Old Grand-Dad bourbon whiskey. The carton, by the way, won a First Prize in this year's Folding Paper Box Association of America Competition.

The distinguished graphic design was created by Gair for National Distillers Products Corp. It's printed in five colors on silver Foiline. The carton's easy tuck top and sturdy Quickset bottom construction makes for quick, safe handling.

Maybe you've got a product that needs something special in the way of a carton. Costs nothing to talk to the man from Gair about it.



gilding The Lily. Mary King line of cosmetics, produced by the J. R. Watkins Co., is a big seller to discriminating women throughout the country—due to its excellent quality and attractive packaging. The use of foil enhances the package design, makes customers conscious of the quality product within the carton. And, along with the luxurious look of foil-laminated board, J. R. Watkins gets the economies of folding carton construction. For a carton that fits your product, your market and your pocketbook, get in touch with a man from Gair.

Gair Package Analysis is a service designed to blueprint a package that will fit your product, your packing and shipping methods and your market. Write us at 155 East 44th St., N. Y. 17, N. Y.



GAIR

creative engineering in packaging

FOLDING CARTONS • SHIPPING CONTAINERS • PAPERBOARD • KRAFT BAGS AND WRAPPINGS
Robert Gair Company, Inc. • New York • Chicago • Los Ángeles

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1956



### MODERN PACKAGING

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#### MODERN PACKAGING

### Plastics can be expendable

Something fundamental and far-reaching is happening to molded plastic packages. Consumers are throwing them away.

This revolutionary idea seems to have had its beginning in the experience of a West Coast ice cream company, which some three years ago tried putting its quality ice cream in pint-size, rigid, transparent polystyrene cups with polyethylene lids. The added cost boosted the retail price of the ice cream by 5 cents and—like everyone else at that time—the company figured that the plastic package would only be justified if consumers found in it some re-use value.

Sales of ice cream in the plastic container went up 200, 400, even 800%—and stayed up. Orders to the plastic molders stepped up from the initial quantity of a few thousand to the hundreds of thousands and finally to the millions. Cost went down accordingly.

Sustained demand, over a period of many months, confounded those who had felt that this would be only a temporary promotion. Buying habits were checked and it was found that many consumers were taking home these packages three and four times a week. Simple arithmetic proved that these steady customers couldn't be saving the containers; their cupboards would be overflowing.

The fact was that they had arrived at the point of regarding plastics as expendable—as expendable as a pop bottle or a tin can.

The plastics industry was quick to sense the change. If re-use strength was not required, the containers could be molded more economically, with thinner walls. New high-impact polystyrene resins and skillful container design brought light-weighting down beyond the fondest hopes. New automatic injection presses raised production to faster and more economical speeds. In the ice cream plant, filling equipment was specially adapted to the problems of high-speed handling of the feather-light plastic containers and cappers to apply polyethylene lids were developed to complete a fully automatic line.

The result: the molded plastic container is today a standard container for consumer-packaged ice cream, used by no less than 37.4% of all ice cream makers. It costs little more than paper. Now being used for a dozen items in the supermarket, it may some day be the first billion-units-a-year plastic package.

Most important, it has established a pattern by which molded plastic packages may find their place in many product fields.

The lesson: Never underestimate the power of consumer preference and never write off a material which at first experience seems too expensive; volume production and technical ingenuity can bring it down and low-cost expendability can create a perpetual demand.

The Editors



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### Dobeckmun packages of Durafilm multiply small-item sales.

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Instances of hardware dealers and industrial supply jobbers welcome package developments like UNI PAK®. he superior clarity of Dobeckmun's Durafilm (polyethylene coated Mylar\*) is a self-merchandising tool which wmotes multiple sales. Sturdy and easy to load—custom packages of this type can easily be printed with your and name and instructions. Other advantages—immediate identification, ease of handling and inventory conmience—are all reflected in a rising profit scale. Think for an instant what a Dobeckmun package like this can do ryour products. Then get in touch with your Dobeckmun representative. Or write Dobeckmun direct.

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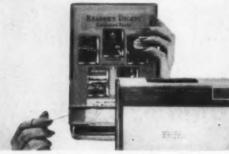
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Rochester • Salt Lake City • San Antonio • Seattle • St. Louis • St. Paul • Syracuse • Tampa • Yakima • Havana • London • Amsterdam

## Harcord packs a purpose



COLGATE'S FOAMING CLEANSER, AJAX, is "cleaning up" in this famous red and white package. HARCORD is proud to be among the suppliers of Colgate's quality fibre canisters.



FULL STRENGTH STRING OPENER. ... The outer plies of board in this unique canister, which can be made in round, square or oblong shapes, are not cut or scored during manufacture. This provides full-strength, fully sealed protection until customer pulls string opening device to cut through package. "Patent Pending



CARAC DUST GUN shoots to kill! HARCORD sealed, tamper-proof package works with easy, action-perfect sliding motion . . effectively directs spray up or down. HARCORD packages like this give customer satisfaction at a cost of pennies.



TWO-WAY PACKAGE that's up on top is Permatex Cooling System Cleaner and Conditioner. A functional, partitioned HARCORD canister which opens on both ends, holds both products... provides long-lasting shelf life at reasonable cost.

you sell it better, you say it best in Paper Canisters by

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# Short-cut packaging that cuts costs too...



Just tape or tie the flexible Ger-Pak liner and you short-cut your protection problems...seal out moisture, dust, contamination. But that's only the start. The tough, chemically inert film protects inner surfaces of the container, practically eliminates costly cleaning—speeds return of your shipping drums. Even more important, Ger-Pak also helps you lower costs by reducing need for heavy, bulky containers—just use lightweight shippers with a Ger-Pak liner.

It's easy to use Ger-Pak plastic liners. The pure, uniform polyethylene film is available in tubing and flat sheeting in most any required widths—unlimited length. Simply use like thin paper, tie with cord, wire, tape or heat seal. Extra advantages are yours with Ger-Pak thin tubing. Just cut to length, heat-seal bottom...insert into container and seal or tie after filling. You short-cut shipping time and work, get a better package. Ger-Pak is highly resistant to acids, alkalis and other powdered and liquid materials difficult to package.



JULY 1956

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### proteins for grow-teens...



KELLOGG'S SPECIAL K® ...
CONCENTRATED HIGH-QUALITY
PROTEIN IN DELICIOUS NEW CEREAL
FORM ... IS PROTECTED BY A SPECIAL
RIEGEL WAXED GLASSINE

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Round and square face powder boxes



Dusting powder boxes in three diameters Talcum powder boxes

Guest soap and sachet set-up boxes

Manufacturers of Fine Paper Boxes ( Novell Council



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# sells safety...glamorously!



hi-state Bex No. 160 21/4" x 83/4" x 22/4" From the world's largest assortment of stock sizes and shapes, or let us mold large quantities to your specifications. Putting color and fashion into a safety device... and then packaging it in Tri-State rigid plastic showcases... is responsible for the remarkable success of the SPI Safety Belt, made by Stephen Products, Inc. of Illinois. In one short year the SPI belt package has actually nosed other brands off the counter because, inside and out, it is a package with tremendous customer appeal. The handsomely woven belt, the fashion colors (10 of them), the jewelry-like

gold-anodized buckle can be seen at a glance.
So can the endless uses for the attractive bonus box.
Crystal-clear rigid plastic conveys the strongest
sales message: this is really superior merchandise,
when the manufacturer is proud to put it on view.
There's a Tri-State rigid plastic box to fit

There's a Tri-State rigid plastic box to fit your product, build your sales, cut down on your packaging operations. Package in rigid plastic for added protection, greater point-of-sales appeal, for bonus utility boxes.



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PICTURE

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FOIL

FRESHNESS.

### PRINTED ON FOIL!

The familiar advertisement for Life Savers, on the facing page, has been changed in only two respects. It is printed on Reynolds Aluminum Foil, giving this scene of snow and brook a gleaming beauty never before known. And the word "Refreshing", originally in the caption beneath, has been changed to "Foil-fresh".

The new beauty is symbolic of the protection used by Life Savers from the beginning... the protection that aluminum foil provides against moisture, air, light and odors. This is the reason why the famous "candies with the hole" are kept so full-flavored and perfect.

Consider the protection of Reynolds Wrap Aluminum Packaging for your product. And let the brilliance of the facing scene remind you that nothing catches the eye like colors printed on aluminum. Call the nearest Reynolds Sales Office. Or write to Reynolds Metals Company, General Sales Office, Louisville 1, Kentucky.

Symbol of Foil Freshness on any Package... Promoted Intensively to Consumers

The campaign behind the Reynolds Wrap Aluminum Packaging Seal carries on into its third year with the power of fullcolor pages in national magazines and consistent every-week promotion on Reynolds network TV\*. In addition, stores across the country feature Reynolds colorful "rainbow" promotion of all foil-packaged products.













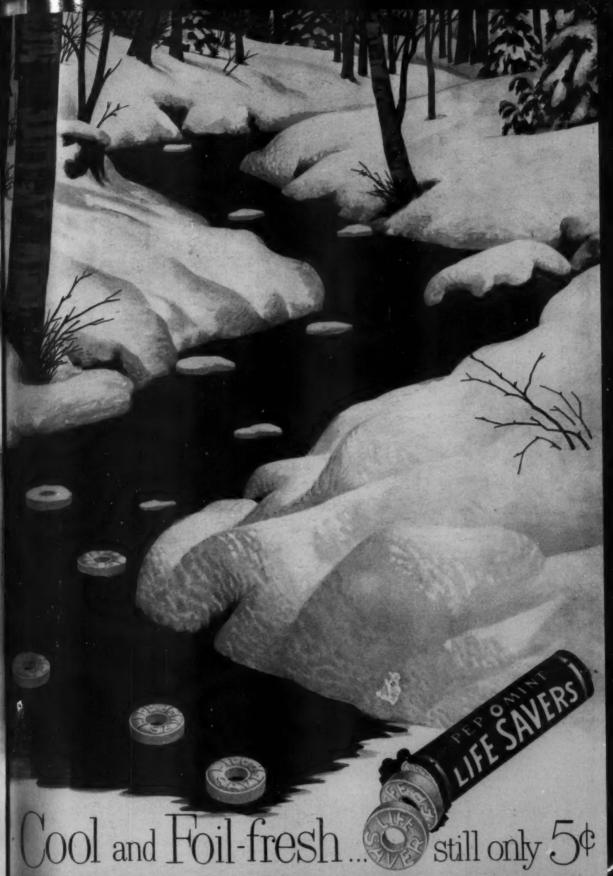




\*See "FRONTIER," Reynolds great dramatic series, Sundays, NBC-TV Network.

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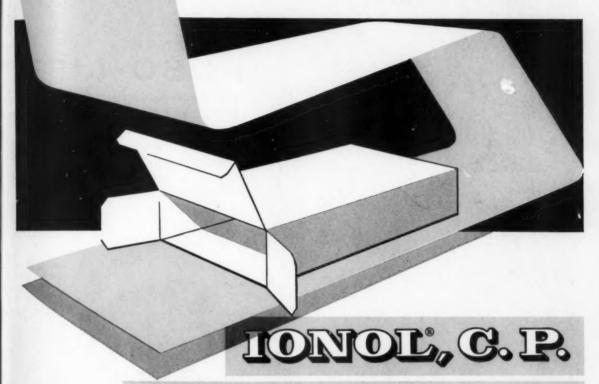
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Your food products customers will welcome this new way to protect flavor and aroma—



### ... Impregnated paper and boxboard

#### combats surface rancidification

Rancidification is the mortal enemy of flavor and aroma. When fats and oils migrate from food products to box or wrapper surfaces, they rancidify quickly. Results: deterioration of quality; reduced shelf life; consumer dissatisfaction.

Now there is an effective new way to solve this troublesome problem... one that will be welcomed by manufacturers of baked goods, cereals, meals, shortening, packaged meats, butter, and similar products. Ionol, C.P. antioxidant — incorporated into the boxboard or wrapping materials in which products are packed—provides long-lasting pro-

tection against rancidity by effectively preventing oxygen attack on fats.

In actual tests, baked goods were stored at 85° F in Ionol, C. P.- impregnated boxboard cartons, which were found to be free of rancidity at the end of ninety days. Without Ionol, C. P.- antioxidant protection, packages of baked goods stored under similar conditions often develop rancidity within a week.

Be among the first to offer your customers this new, effective packaged foods protection. Write for: "Ionol, C.P. for Impregnating Paper and Paperboard."

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to bring new economy and speed to packaging . . .

### LYNCH

adds two new members to its family of fine packaging machines!

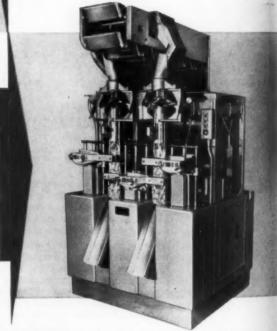


### ROBO-LIFT

This versatile conveyor is specifically designed and engineered to handle bulk materials with the gentle action necessary for many types of food, drugs and chemicals. It operates vertically, horizontally, or both. The compact Robo-Lift is the answer to sanitary conveying and for problems that rise from space limitations. Wherever a bucket conveyor system is indicated, the Robo-Lift fills every requirement. Investigate Robo-Lift today!

### ROBO-WRAP

This new member of the Lynch family efficiently forms, fills and seals food, drugs, candies and novelties in pillow-type packages — automatically, at high speeds. Simple installation, easy accessibility, adjustable variances and accurate registration are just a few of the outstanding features that make the Lynch Robo-Wrap a profitable investment for all industries using flexible unit packaging. Write, wire or phone for complete information!



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HIGH ADHESIVE hold and impact strength of Permacel 16 Strapping Tape assures safe arrival of cartons. Moisture resistant. Available in seven colors. One of a complete line of Permacel packaging tapes.

# PERMACEL TAPE

From Permacel Research . . . the right tape for any job. Write Permacel Tape Corporation, New Brunswick, N.J.

a Johnson Johnson company

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# why show your products in the NEGATIVE ?

Here is clearly the finest "showcase" ever created to protect a host of products—a new Polyvinyl chloride packaging film developed by the Goodyear Film Laboratories.

It is VITAFILM, and it has a wonderful clarity, wonderful texture and feel—toughness and tear resistance—to enhance textiles, hardware and paper products in excellent fashion.

It can take a beating, and still protect what it holds—and all the while show what it holds to best advantage!

VITAFILM heat-seals easily with a positive weld, takes printing beautifully, adapts readily to all kinds of automatic packaging machinery. And it's available in bags, too—ready to take products to market in a grand manner!

The Cost? Best news yet! Get in touch with your Goodyear Packaging Engineer and see how little the showmanship and stalwart protection of VITAFILM costs! Write: Goodyear, Packaging Films Dept. S-6418, Akron 16, Ohio. Samples on request.



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The finest in sheer protection

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JULY 1986

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Out of General Chemical Research...

# The Ideal Propellant

For Perfume, Cologne and Personal Product Aerosols

A vost field of new profit opportunities in cosmetic and personal product aerosols is opened by "Genetron" 320/101 Propellant. It is ideal for pressure packaging numerous alcohol-based products . . . anti-perspirants, colognes, perfumes, pharmaceuticals and many others.

Now, glass, plastic and aluminum containers of the most attractive, functional designs can all be used for packaging because of the lower vapor pressures and hydrolysis rates of "Genetron" 320/101. And you insure maximum package safety under consumer use and storage conditions, too.

Unique fragrance-enhancing characteristics with essential oils and perfumes make "Genetron" 320/101 Propellant a virtual "must" for such aerosols as colognes and perfumes.

Greater sales appeal is youn, because "Genetron" 320/101 Propellant has high vapor volume plus low liquid density, which means more products can be packaged with less propellant ... the containers look fuller, not half empty.

Customer satisfaction is further assured by steady vapor pressures of "Genetron" 320/101 which give uniform, even spray patterns until the container is empty... a tremendous competitive advantage. See your contract filler now about using "Genetron" 320/101 for pressure, alcohol-based aerosol formulations.

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Glamorous, New,

Low-Pressure

Allied

There's a "genetron" Propellant for Every Aerosol Need

For further information send for our illustrated technical manual and market data book—"All About Aerosols."

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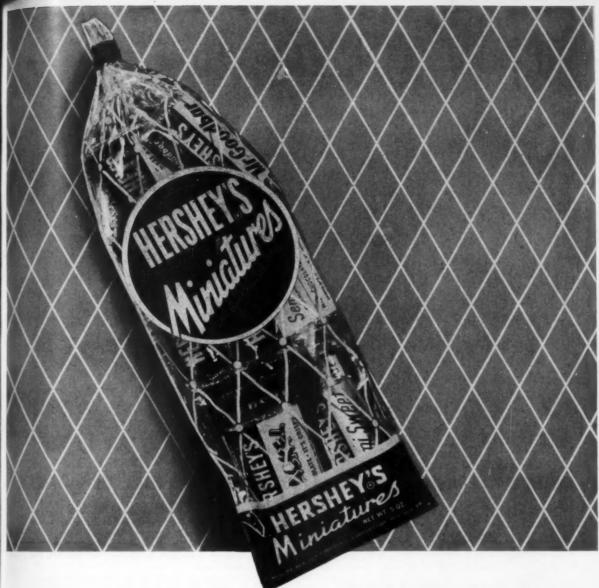
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### ...your natural source for packaging

IT'S NATURAL that a firm like the Hershey Chocolate Corporation would choose the best suppliers for its transparent packages... best in all respects: technical ability, reliability, economy.

Naturally, Hershey chooses Cellu-Craft as a packaging source of supply, because Cellu-Craft's "know-how" is the result of more than twenty years of research and experience.

And Cellu-Craft is your natural source for flexible packaging, for Cellu-Craft created and produced packages

enhance the sales value of any product.

Send us your product or present package for expert analysis or call for a Cellu-Craft Packaging Consultant today. No obligation, of course.

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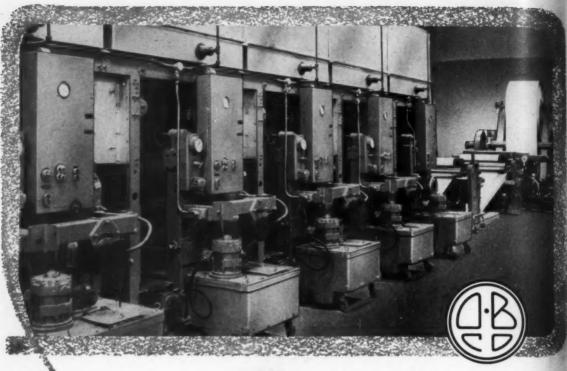
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# NEW Stande 1000"

### BRINGS VERSATILITY TO OHIO BOXBOARD GRAVURE DEPARTME

The Ohio Boxboard Co. plant at Rittman, Ohio, has installed a Five Color Staude "1000" Rotogravure Press, a Staude Butt Splicer and an in-line Mercury Die Cutter-Creaser. This combination, equipped with a new web tension control system, is the closest approach to automation in the industry

Ohio Boxboard knows well the quality, speed and cost advantages of gravure. This new Staude and cost advantages of gravure. In is new Staude installation with its larger cylinders and design for quick change, adds the big operating advantage of versatility. Frank Kulow, Gravure Supervisor, says of the new Staude, "We are very enthusiastic about the potential of the gravure process and are looking forward to top product quality, uniformity and production."

- J Prints webs up to 45" wide with 23" to 46" circumference engraved cylinders—a production bonus of 20% to 25% on every impression.
- Continuous press operation achieved with Turn Over Roll Stand, Automatic Butt Splicer and Mercury Die Cutter-Creaser.
- Fast changeover of only 15 minutes per color—each color station is a complete rotogravure printing unit.
- New web tension system in electric drive assures

### Write for Stande 1000" Bulletin E. G. Steude MANUFACTURING CO., INC.

Rotogravure Press Division: SPRINGFIELD, VERMONT Eastern Office: 35 Beechwood Ave., Mt. Vernon, N. Y.
Phone Mt. Vernon 4-3753
Chicago Office: 82 W. Washington Bivd. Phone ANdover 3-4



In-line Mercury Die Cutter-Creaser's 200 strokes per minute allows continuous operation.



Butt Splicer automatically splices web of one roll to another without stopping the press.



Turn-Over Roll Stand brings all sizes of roll stock into position for uninterrupted splice.



# Coating of ALATHON® polyethylene resin provides more protective, durable packages

The superior properties of Alathon polyethylene resin make it suitable for a wide range of coating applications. Alathon is tough and resilient. It is extremely flexible even at temperatures as low as  $-100^{\circ}$  F. and is often specified for frozenfood packages.

Inert to many solvents and most chemicals at room temperatures, ALATHON is non-toxic and essentially free of taste and odor. Strong, lasting heat seals can be made between films of ALATHON in the temperature range of 250°F, to 300°F.,

yet it shows little or no tendency to stick to other materials at temperatures below 200°F. Heat seals can also be made between papers coated with Alathon, face to face or face to back.

The Leslie Salt Co. overcame a difficult packaging problem by using caps coated with ALATHON for its salt canisters. The asphalt liner, previously used to keep moisture from the salt, bled through the cap material in the shrinking operation to produce dark stains. ALATHON not only gives the re-

quired protection to the salt, but since it does not bleed, the package retains its clean, neat appearance. The Guardian Paper Company of Oakland, California, supplies these caps of sandwich construction, with ALATHON laminated to board and yellow kraft paper.

Whether you are interested in packaging that involves coatings, containers, film or closures, ALATHON polyethylene resin may help you. For complete information, just clip and mail the coupon below.



E. I. du Pont de Nemours & Co. (Inc.), Polychemicals Department Room 247, Du Pont Building, Wilmington 98, Delaware In Canada: Du Pont Company of Canada Limited, P.O. Box 660, Montreal, Quebec

#### MAIL TODAY FOR ALL THE DETAILS

Please send me more information on Du Pont ALATHON polyethylene resin. I am interested in evaluating this material for:

Name	
Position	
Firm Name	
Street Address	
City	
State	
Type of Business	

GING

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# Which cushioning material will give

MATERIAL X

MATERIAL X under a weight of 3/2 pounds per square foot

Cushioning Material X, in the photograph on the left above, looks thick enough to protect practically any product against breakage. It's almost twice as thick as the first Kimpak sample on the right. But see how Material X compresses to less than half its original thickness under a Standard Weight. Kimpak under the same weight compresses very little.

The thickness of a cushioning material under a standard load is called "effective thickness"—or in other words, thickness in use. It's the single most important quality of any cushion.

FREE\_ send for your Standard Weight today! Measures
the thickness of cushioning materials under the
standard load prescribed by Federal Specification

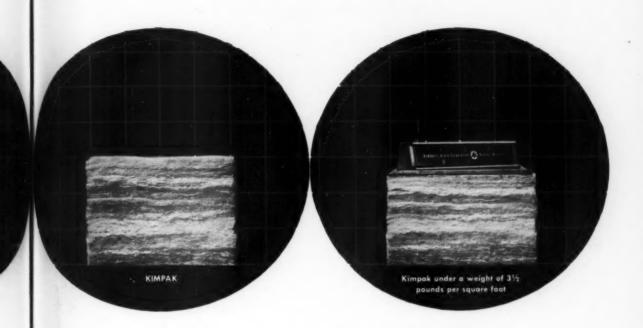
Here is a tool that will enable you to compare and choose the cushion that gives maximum protection for your money.

Precision made of sturdy aluminum, the Standard Weight is easy to use. Directions are printed on the face.

Kimberly-Clark offers this Standard Weight free to all packaging engineers and cushioning buyers. Just ask the Kimpak salesman who calls on you. Or write to Kimberly-Clark, Dept.M.7, Neenah, Wis.



### will give your product better protection?



### You can depend on the effective thickness of Kimpak to give you positive protection!

Compare the "effective thickness" of the cushion you're using now with Kimpak. You can do it easily, quickly with a Standard Weight designed to check thickness under the 3½ pound per square foot loading required by Federal Specification.

A Standard Weight eliminates any fluffy, non-working consistency of a cushioning material—gives you an accurate picture of the working cushion in your package.

You'll find the "effective thickness" of Kimpak insures reliable shock absorption and surface protection. Kimpak shields your product from the roughest handling—protects it from movement—and from dirt and cinders that sift into the dontainers. You'll find, too, this superior protection costs no more than ordinary packaging materials.

Call your Kimpak salesman. Ask him to show you the Kimpak line—today!

Kimberly Clark Corporation, Neenah, Wis.

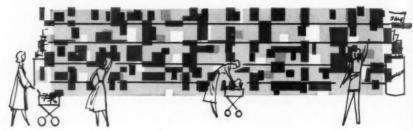


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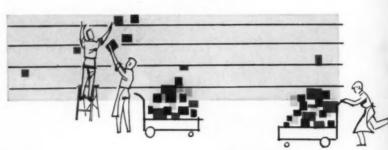


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# merchandise moves faster in $action-packed\ packages$



Ritchie

That last short move—to the customer's hand—is often determined 'way back in the design of your package. Ritchie packaging is conceived and executed with a single objective: to make that final move in your direction. Result—another famous Ritchie Package . . . original, eye-stopping, self-selling. Let a Ritchie "Action-Package" designer show you the hidden salability in your product.



learn how you can get the most out of your packages. Write for your free copy of "THE SELL-ING PACKAGE".

SALES OFFICES IN ALL PRINCIPAL CITIES



Ritchil and COMPANY

BB01 Baltimore Ave. • Chicago 17, Illinois

A SUBSIDIARY OF STONE CONTAINER CORPORATION

# GM-1000

The Laminator for Glue Mounting and Heat-Seal Laminating



to Film, Paper and Board

- Laminating and coating, or coloring, or print treating, or endless design printing in one pass through the machine.
- Coating and coloring free foil or film for rewinding or heat-seal laminating.
- Drying system scientifically engineered for your particular requirements and utmost efficiency.
- Built on unit principle, additional combinations may be obtained, such as laminating both sides of web, diecutting or sheeting in same operation.
- GM-1000 Standard units can be installed in your own machines for inline operations.
- Complete machines fully guaranteed for a turn-key operation.

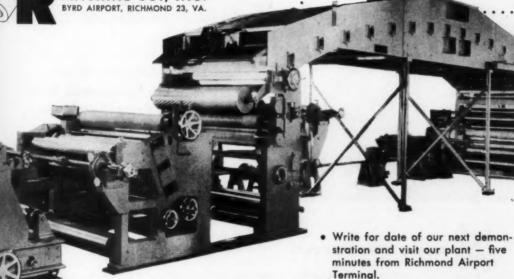
...and a complete Rotogravure Cylinder Service, too



INTA-ROTO

MACHINE CO., INC.

This is the Super GM-1000 Combination Laminating, Coating or Coloring Machine for glue mounting, heat-seal laminating or coating. A specially designed GM-1000 laminates board up to 40 point.



THE SPECIALLY DESIGNED GM-1000 LAMINATES FOIL AND PAPER TO BOARD

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# HANDS APPROVE







Your production man approves because Hazel-Atlas quality control is geared to mesh with yours. Light weight, delicate looking, glistening H-A containers are tough on the production line and easy to

Dealers approve because every H-A glass package makes for easy display with shelf appeal that means sales.





And, most important of all, consumers approve, for each H-A container and closure is designed with the home maker in mind. She appreciates a beautiful package with its visual inventory.



HOME APPROVED

HAZEL-ATLAS GLASS COMPANY WHEELING, W. VA.

#### MODERN PACKAGING

Watch for an announcement that the National Packaging Exposition will by-pass Atlantic City in 1958 and go to New York City's spacious, new air-conditioned Coliseum at Columbus Circle. Arrangements have been made and await only endorsement by exhibitors council. Rumors that the new Packaging Machinery & Materials Exposition will tackle the Coliseum in 1958 are unfounded.

July 1956

Cook-it-in-the-bag convenience may be extended to fresh produce, if a market test now under way is successful. Vegetables pre-trimmed and washed are sealed in bags of polyester (Mylar) film; may be stored under ordinary, non-freezer refrigeration until wanted and then can be dropped, bag and all, in boiling water or heated in oven. Superior flavor and vitamin retention are claimed.

Year-ago comparisons, now available as the monthly U. S. census of converted flexible packaging products enters its second year, reveal rapid progress in this branch of packaging. Shipments in January were 16.7% above the January, 1955, total; February was up 20.9% over a year ago, and 3% over previous month. March gained another 4%.

Superb promotion and advertising campaign of Glass Container Mfrs. Institute has other container industries taking notes. High-styled color photography and simple, subtle copy suggesting "good taste" of foods and beverages in glass makes GCMI ads standouts in consumer magazines, pleases glass packagers as well as glass producers. Latest is a summer-long campaign for bottled soft drinks. No brand or company names are ever mentioned.

Independence of tin is rapidly becoming a reality in the can industry. Nearly 10% of the 36 billion cans produced last year used cemented side seams and no tin at all. Now American Can Co. announces a new process by which cans with soldered side seams—still necessary for all heat-processed products—may be made by "margin plating," which deposits tin only on the 3/16-in. seam area. Coffee and pet-food cans now use this process; beer cans are next. Canco predicts that in the future half of all cans will use either margin-plated or cemented seams.

Trading-stamp craze may be here to stay, despite criticism that it represents, for manufacturers, an expense that might better be devoted to more protective, more convenient packaging. Stamp-redemption business is now close to \$1 billion a year. Top Value (second largest stamp company, part owned by Penn Fruit chain) opens four new smartly designed redemption stores in Philadelphia area, on the theory that the swapping should be as stylish as the shopping.

Consumer acceptance of instant food products leads packagers in other fields to consider possibilities of concentrated products, with resultant saving in container size and weight. Drug and toiletries field has precedent in concentrates like shampoos and mouth washes, now studies extension of principle to other products. Remarkable success of instant coffee—now a \$300-million-a-year business—is credited with pushing glass-container sales last year to a record 135.5 million gross.

Slight slip in demand for paperboard is noted by Wall Street observers as possible sign of general business slowdown. The slip amounts to a decline in paperboard backlog from record 725,000 tons last

Background

for

packaging

Notes,
quotes
and comments

November to 490,000 tons in unfilled orders now. Easing pressure made it possible for mills last month to cut their price for waste paper, which has been fantastically high. The relief is welcome and is believed in packaging circles to reflect nothing more than a slightly more conservative policy among packagers on forward buying.

Food for thought: "When the buyer, the advertising agent and the carton manufacturer frankly accept, in all regards, the package as an advertising tool, the cost will no longer bear the stigma of unjustifiable expense any more than any other portion of an alert advertising campaign carries the stigma of expense." Arthur L. Harris, president, Atlanta Paper Co.

Significant findings in the Ross Federal Research Corp.'s latest report on its continuing study of marketing viewpoints of 200 leading manufacturers of packaged products: 84% (a figure which has been almost constant through the five years of this study) are currently considering the introduction of one or more new products, requiring new packages. And lack of pre-testing of packaging is one of the five most frequently mentioned reasons for the failure of new products in the past.

Use of irradiation to improve packaging properties of polyethylene has been generally put aside pending introduction of the new low-pressure polyethylene resins, which may produce the desired properties, including sterilizability, more economically. Meanwhile, Bradley Container Corp. finds an interesting use for its irradiation equipment: hardening one end of polyethylene tubes which are used, by the millions, as ball-point pen refills.

Food packaging problems will be subjected to comprehensive, cooperative attack through the new Inter-Industry Food Packaging Committee, organized at the recent Super Market Institute meetings in Cleveland. Representatives of the manufacturing, wholesaling and retailing segments are thus brought together to seek common answers to such questions as package dimensions, placement of price spots and shipping-case marking. The group will have the help of the industrial press, including MODERN PACKAGING. Offices have been established at 520 N. Michigan Ave., Chicago.

Competitive position of glass containers is improving rapidly with the trend to new designs which are said to save up to 20% in weight without loss of strength. Same principle is extending one-trip-bottle convenience beyond beverages into industrial chemicals and other products where returnable containers have been the rule. Owens-Illinois now has three of its container plants operating the advanced G-50 jar-forming machine, which turns out the light-weight wide-mouth food jar at double the speed of older-type units.

Wooden containers, fast losing to paperboard in the produce-shipping field, may get a new chance through a combination water-repellent and fungicide treatment which greatly lengthens life of re-usable containers. Commercial preparation based on 10% copper-8-quinolinolate is said to be non-toxic, odor- and flavor-free, permanently invulnerable to weathering and harmless to the tensile strength of wood fibres. It will have its first big test in the harvesting of 3,500,000 tons of tomatoes this summer.

Are private brands being pushed too hard? Editor Robert W. Mueller, Progressive Grocer, thinks so and notes growing dissatisfaction of customers in inability to find well-advertised national brands in chain stores, which he thinks may react to the benefit of the independent retailer.

**Background** 

for

packaging





# a live lily

A really live organization is the Lily Mills Company . . . alive and on top with quality in their products . . . alive to the marketing advantage good packaging affords them . . . alive to the benefits derived from purchasing their labels, film and box wraps from . . .





PACKAGE PRODUCTS COMPANY, INC

CHARLOTTE, NORTH CAROLINA

CONVERTERS OF FILM, FOIL, GLASSINE, PAPER — ROLLS, SHEETS — BAGS ENVELOPES — ROLL, DIE CUT LABELS — RIDERS — BOX WRAPS — INSERTS

#### 1881 - 1956 SEVENTY FIVE YEARS AGO THIS WAS



# America's First Metal Closure

Even sharper than the contrast between our first metal closure and our screw caps today is the difference in our production facilities and methods. For example—this year, our seventy-fifth, our production capacity is greater than ever before in our history. Our equipment through constant improvement grows continually "younger." And our quality standards of today would have been humanly impossible only a few years ago.

This continual "rejuvenation" of both equipment and methods has but one purpose . . . the constant betterment of the closures we provide to our customers.

America's First Manufacturer of Metal Closures

BERNARDIN
BOTTLE CAP COMPANY, Inc.
Evansville, Indiana



### PROTECTION is our business, too



As alert jet pilots of this country's air defense stand always ready to guard our nation's security—Jones & Laughlin Steel Containers protect your products by providing dependable packaging that assures safety in transportation and storage. Precise fabrication provides accuracy in all fittings and closures.

J&L drums and pails are chemically cleaned and dried by the JaLizing process. This assures a clean and dry, rust-inhibiting surface and increases the adherence and durability of decoration and interior lining.

Special protective interior linings are available to provide the best possible packaging for your products.

Jal-Coat, J&L's lithographing process, applies your trademark and sales message to the finished container . . . no side seam touch-up is ever required.

Plants located at Atlanta, Ga.; Bayonne, N.J.; Cleveland, Ohio; Kansas City, Kansas; Lancaster, Pa.; New Orleans, La.; Philadelphia, Pa.; Port Arthur, Texas; and Toledo, Ohio.



Jal-Coat, J&L's exclusive color lithographing process, adds sales appeal to your products.





CONTAINER DIVISION



### Revolutionary new machine attaches recipes, contest rules, coupons, etc., automatically—up to 220 per minute!

To bring you the sales advantages of outside message attachment, without slowing down your production line or using costly hand labor, Pfaudler has perfected the fastaction Outsert Applicator, Model OA-3MC.

This efficient machine puts your message precisely where it belongs on your package. There's no chance of sloppy hit-or-miss location of the outfold covering your brand name or trademark, as often happens with hand labor.

#### Up to 220 containers per minute

The Pfaudler Outsert Applicator attaches your consumer messages to all cylindrical containers of plastic, glass, paper or metal—25%" to 71%" in length, 11%" to 61%" outside diameter. (Special designs are possible for containers outside these limits.) Speed varies slightly with container size.

#### Fits right into production line

The unit fits readily into most production line setups, requires only four square feet of floor space. There, it works in continuous operation, gripping free rolling containers from your labeling machine and forwarding them, with leaflet accurately

attached, to the casing machine, ready to pack and ship.

#### Low maintenance

Advanced design and careful selection of materials give you a durable machine, capable of long continuous runs. And there are no delicate mechanisms to fail.

If you're interested in the sales advantages of outserts for your product, simply forward a sample labeled container with outsert affixed correctly. Pfaudler engineers will analyze your requirements and send you full information. Or, if you prefer, write for Bulletin 933. There's no obligation, and you're the one to benefit.

THE PFAUDLER CO.



ROCHESTER 3, N.Y.



IN THEIR WIDE RANGE OF PRODUCTIONS YOU WILL FIND JUST THE FILM YOU NEED.

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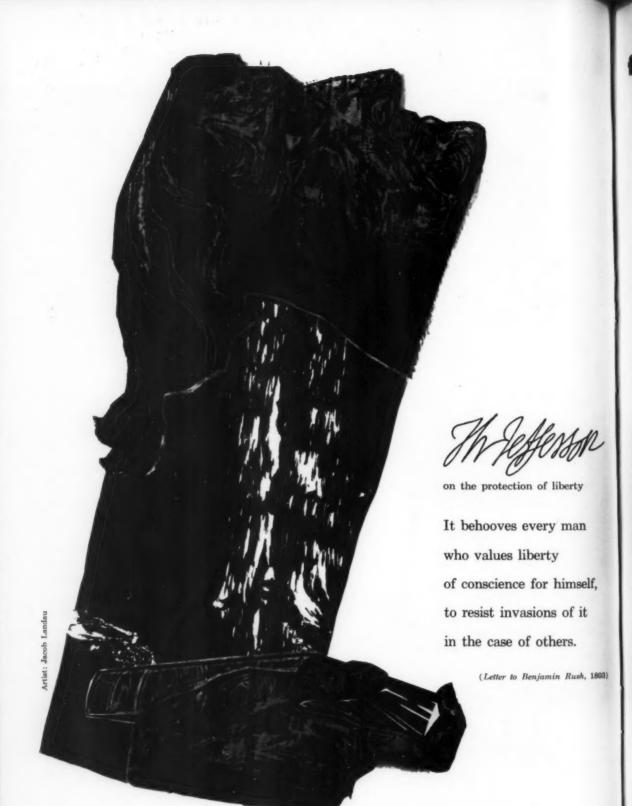
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YOU MAY CALL ON THE EXPERIENCE OF OUR TECHNICAL STAFF TO HELP YOU SOLVE ALL PACKAGING PROBLEMS AS WELL AS ALL QUESTIONS IN CONNECTION WITH THE CONVERSION OF CELLULOSE FILM.

THE ORIGINAL TRADE MARK "CELLOPHANE" REMAINS THE PROPERTY OF LA CELLOPHANE S. A. THROUGHOUT THE WORLD, WITH THE EXCEPTION OF: AUSTRIA - BELGIUM - DENMARK - FINLAND - GERMANY - ITALY - MEXICO - NETHERLANDS - NORWAY - SPAIN - SWEDEN - UNITED KINGDOM & BRISTISH COMMONWEALTH - UNITED STATES OF AMERICA - CENTRAL AMERICA

(TRADE MARK "FRANCEPHANE")



Great Ideas of Western Man... ONE OF A SERIES CONTAINER CORPORATION OF AMERICA



from this



Another outstanding packaging "FIRST"!

to this

with MYLAR\*

and



Significant new development produces a superior flexible package on automatic, high-speed STOKESWRAP at low cost

Mylar, the new transparent polyester film with a tensile strength one-third that of steel plus other highly desirable properties, has been successfully adapted to automatic, high-speed flexible packaging. It opens up a whole new field of exciting application possibilities.

#### Automatic, low cost packaging

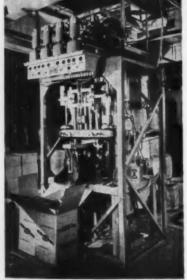
Coated with polyethylene extrusion on one side to assure positive heat sealing, Mylar is now being used to package sharp-edged steel spring-lock washers by the Philadelphia Steel & Wire Corporation. STOKES-WRAP automatically forms a pillow-type package with a unique fold-over vertical seam from this preprinted Mylar film...then fills the package with a precisely controlled number of washers measured by a net weight scale feed mechanism. Each package is coded automatically for quick identification of many sizes and quantities. Package length is quickly adjusted accordingly.

Actual tests prove that these flexible packages withstand rough handling in shipping and are the equal of the metal-edge fibre carton previously used.

#### From hardware to electronic components

Ideal for packaging hardware, automotive, electronic and similar small component parts, STOKESWRAP and Mylar may be the answer to cutting your costs.

"Mylar" is the DuPont trade name for its brand of polyester film.



In the Philadelphia Stool & Wire plant, STOKESWRAP outomatically packages and codes 30 units per minute in a wide variety of sizes. Packages are delivered directly into shipping carloss.



STOKES & SMITH CO.

4904-Y SUMMERDALE AVENUE, PHILADELPHIA 24, PA.

Pocific Coget: SIMPLEX PACKAGING MACHINERY, INC., 534-23rd AVE., OAKLAND 6, CALIF.

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SUBSIDIARY OF FOOD MACHINERY AND CHEMICAL CORPORATION

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1803)



DON'T touch that seal, Mister. One little twist and the slotted burglar-alarm band will break, announcing "This Bottle Has Been Opened!" You can't tamper with an Alcoa Pilferproof Seal and get away with it.

Alcoa Pilferproof Seals can be applied only by a special machine which we sell or lease only to reputable manufacturers. The sealing machine tailors each closure to its individual bottle. Four models are available with speeds ranging up to 400 bottles per minute.

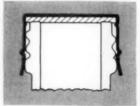
Alcoa Pilferproof Seals are now guarding drugs, liquors, toiletries and products of all kinds against pilfering and counterfeiting.

Let us show you how they give you these, and many other advantages. Call your Alcoa sales office.

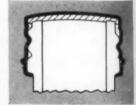
Write for informative booklet, Alcoa Closures. Aluminum Company of America, 1705-G Alcoa Building, Pittsburgh 19, Pennsylvania.



THE ALCOA HOUR—Television's Finest Live Drama Alternate Sunday Evenings



Before application. Straight-sided skirt of pure, nontoxic Alcoa Aluminum is placed on container and held under uniform, controlled pressure. Glass sealing surface is embedded into the liner, making a positive seal.



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After application. After seal is made, rollers form the skirt to the exact contours of the bottle threads. Since and does not turn, liners are never scored. Exclusive burglar-alarm band remains intact until closure is twisted open.

Your Guide to the Best in Aluminum Value







but opens easy!

Your Production Benefits because Easy Open goes on in a smooth, even film. Busy stores tend to handle an easily opened case first. So, Your Customer Benefits because you've made his job easier; and You Benefit because your product moves quickly on and off the shelf.

Check over the characteristics of Swift's EASY OPEN Case Sealing Adhesive outlined at right, compare them with those of any case sealer you may now be using, then write for a trial quantity. You'll be glad you did when you can add EASY OPEN to the list of your selling points for your product. Remember, too . . .

ONE TRIAL IS BETTER THAN A THOUSAND CLAIMS

HIGH SHEAR STRENGTH combined with low tensile strength means bonds made with Easy Open hold tightly in transit, but release immediately-on a vertical pull.

MACHINES SMOOTHLY. Developed with an eye to the future, Swift's Easy Open works well on a wide variety of carton stocks. Goes on in a smooth, even film to assure trouble-free operation.

HIGH MOISTURE RESISTANCE of Easy Open gives additional protection to your valuable merchandise.



To Sorve Your Industry Bette

#### SWIFT & COMPANY

ADHESIVE PRODUCTS DEPARTMENT

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#### BETTER NET

for you, too -



IN THIS MAGIC BOX

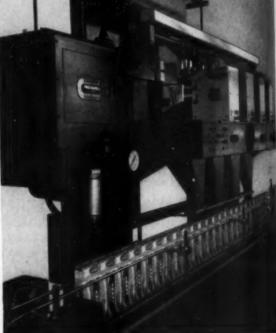


PRODUCT net weight, we mean—a highly important factor to America's volume producers of packaged goods... because it can, and does, have a direct bearing on net profits.

PNEUMATRON provides net weighing accuracy never before available . . . using a new instantaneous pressure principle. The Pneumatron "head" contains a highly responsive cantilever assembly which moves only a few thousandths of an inch during the weighing operation—eliminating wear and friction. An extremely sensitive control device—an air jet—instantly detects and measures the position of the weighing assembly—keeps package contents within tolerances which are remarkably close.

That's PNEUMATRON, in brief. Now setting new standards of dependability and economy in the packaging of the products pictured above, it is the culmination of Pneumatic's years of specialization in the engineering and building of automatic packaging equipment. Such advanced design is characteristic of all Pneumatic equipment for bottling or packaging.

PNEUMATIC SCALE CORP., LTD., 82 Newport Avenue, Quincy 71, Massachusetts. Also: New York; Chicago; Dallas; San Francisco; Los Angeles; Seattle; Leeds, England. Canadian Division: Delamere & Williams Company, Ltd., Toronto.





Packaging and Bottling Equipment

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# Full line of pruning shears "sees the light" through sparkling windows of MYLAR®

"We were seeking an effective selling package for our complete line of pruning shears. We wanted protection and, at the same time, wanted the shears to be seen. Du Pont 'Mylar' solved our problem,' reports J. Wiss & Sons, Inc., Newark, N. J. "Because of its clarity and high tear strength, 'Mylar' makes a perfect window material for an otherwise hard-to-package item."

The new Wiss carton is another example of how Du Pont "Mylar" polyester film has made possible a large window where none was practical before. Combining high tear resistance, impact strength, and amazing durability, "Mylar" gives lasting transparent protection and improved sales appeal to a wide variety of products.

Only windows of Du Pont "Mylar" offer all of these advantages:

- · Vivid clarity
- · High tensile and impact strength
- Extremely long life
- . Stability . . . won't shrink or warp carton

For more information on the packaging applications of "Mylar" see your box maker or call in your Du Pont representative. If you prefer, mail coupon.

\*MYLAR is Du Pont's registered trademark for its brand of polyester film.



BETTER THINGS FOR BETTER LIVING ...THROUGH CHEMISTRY

MYLAR®
POLYESTER FILM

E. I. du Pont de Nemours & Co. (Inc.), Film Dept., Room MP-7, Wilmington 98, Delaware

Please send me information on "Mylar" polyester film for window boxes.

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Address \_\_\_\_\_

City\_\_\_\_State\_\_

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SHOPPERS LIKE TO BUY PRODUCTS
THEY CAN SEE





# Brownie cookies keep fresh and sell faster in fractional cellophane packs

Brownie Baking Company of Spokane, Washington, gets double merchandising value from its use of Du Pont cellophane. First, the good looks and appetite appeal of the cookies stand out in transparent cellophane. Just as important, shoppers instantly recognize the convenience and freshness protection that come with cellophane inner packs.

Is this convenience principle adaptable to your product? Would a cellophane fractional or multiple pack give your product more impact at point of sale?

Selling appeal, proper protection, printability and ease of handling are major considerations in the selection of a packaging material. You'll find Du Pont cellophane fulfills these needs. E. I. du Pont de Nemours & Co. (Inc.), Film Department, Wilmington 98, Delaware.

ONLY DU PONT OFFERS YOU ALL THESE PACKAGING ADVANTAGES: Over 100 varieties of film



technical experts to advise you consumer buying studies.





powerful national advertising to back you.

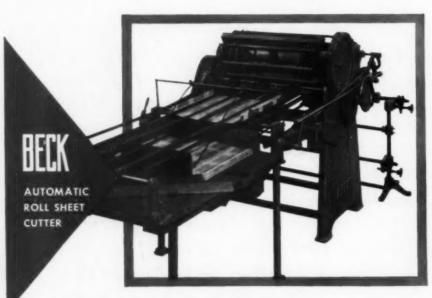




DU PONT PACKAGING FILMS

ACETATE FILM

# This can be the cheapest machine you ever bought



The fastest-yielding investment in its field! That's the Beck Automatic Roll Sheet Cutter. And you don't have to be a cost expert to figure out why. Simply determine what cutting is costing you on the basis of total sheets cut per year. Stack this figure against the price of a Beck Machine. Chances are you'll discover what a large user of cellophane sheets found out: his total annual savings — even with intermittent use of the machine — amounted to more than its cost. And it does not matter what you cut — for this machine cuts practically anything that comes in rolls. Just send us a sample of your material and we'll tell you frankly what a Beck Machine can do for you.

CHARLES BECK MACHINE CORPORATION 20 CHURCH ROAD KING OF PRUSSIA, PA.

Indispensable in 74 different sheeting and cutting applications

Here are 4 out of 74 different applications for BECK machines:



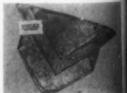
ENVELOPES



BLANK BOOKS

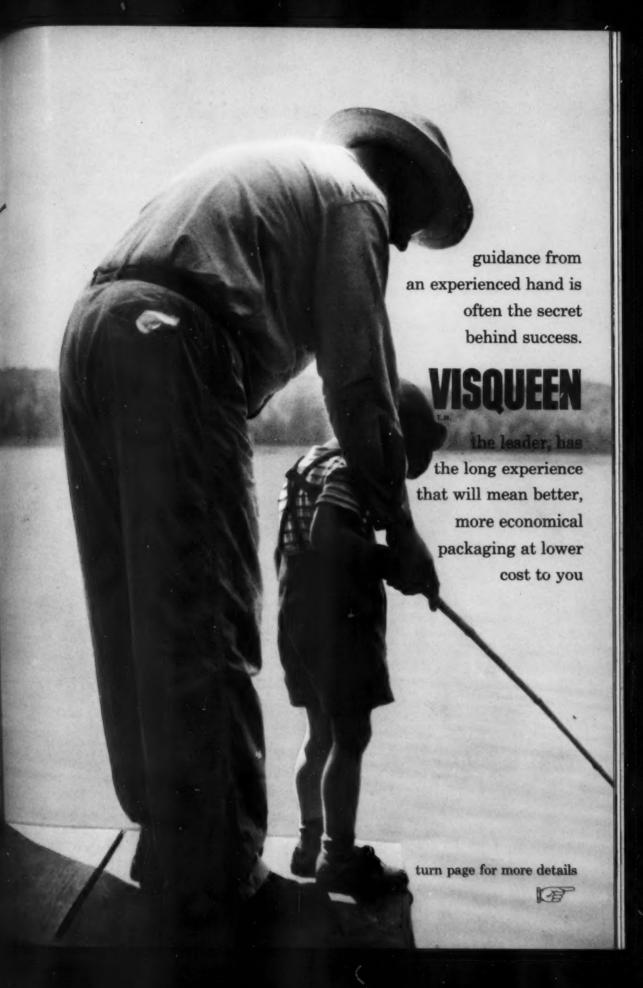


SENSITIZED PAPER



WIPING CLOTH

AUTOMATIC ROLL SHEET CUTTER . RAZOR BLADE SLITTER AND REWINDER . AUTOMATIC BAG CUTTER & FOLDER
SHEET-PRINTER FOR SAMPLE BOOKS . ENGRAVED ROLL PRINTER



BECK

ELOPES

PAPER

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#### smart packagers select VISQUEEN film

Kerrybrooke professional uniforms retain their crisp, clean appearance indefinitely in bags made of clear, sparkling VISQUEEN film. Packages withstand roughest customers handling...won't split, crack or run. Use tough VISQUEEN film and eliminate profit-pinching markdowns. Print right on the package and be sure of lasting brand identification.



NATIONAL SALES FORCE of trained technical representatives to assist you.

PACKAGE ENGINEERING EXPERTS to help you with polyethylene packaging problems.

MODERN LABORATORY FACILITIES to test any polyethylene film for your protection.

NATIONAL ADVERTISING PROGRAM to promote the use of polyethylene only.

LARGEST SELECTION of specially developed, superior quality polyethylene films.

THREE LARGE PLANTS producing only polyethylene film to serve you better.

Important! VISQUEEN film is all polyethylene, but not all polyethylene is VISQUEEN.
Only VISQUEEN has the benefit of research and resources of The VISKING Corporation.



#### THE VISKING CORPORATION

World's largest producers of polyethylene sheeting and tubing

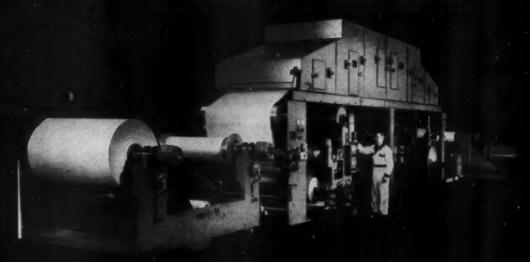
Plastics Division, Terre Haute, Ind.

IN CANADA: VISKING LTD., LINDSAY, ONTARIO . IN ENGLAND: BRITISH VISQUEEN LTD., STEVENAGE



MERCURY MACHINES - PACESETTERS FOR THE FOLDING CARTON INDUSTRY

# DESIGNED TO DO MANY EXACTING JOBS...AND DO THEM BETTER



Mercury

... for combining foil, film or paper to paper or boxboard, for coating or gravure printing. All of the advanced engineering and built-in ruggedness which characterize Mercury machines. The web-fed method at its best ... by an organization specializing in web-fed operation.

A Mercury representative can be most helpful in discussing with you your standard or special laminating or coating problems. Write or phone for an interview, at your canyonience.

Profit Producing Machinery for Paper Convertors

MERCURY ENGINEERING CORPORATION

2100 NORTH FARWELL AVENUE MILWAUKEE 2, WISCONSIN, U.S.A.

#### WHAT'S YOUR LINE?







PACKAGING



PACKAGING POWDERS



LIQUIDS

PACKAGING LIQUIDS, SOLIDS

# Bartelt's "Panel of Experts" will be at the PMMI Show to Help You!

You see illustrated here just a few of the many types of packages to which Bartelt's "Panel of Experts" have adapted their famous automatic production machinery. At the PMMI Show the panel will be available to you for a concentrated discussion of your packaging problems at no cost to you. Bring

actual samples of your product and your present packaging. Give us your requirements. If, like the internationally famous brands shown here, your product can be contained in a pouch style, heat sealed package... see us in Booth 103. Bartelt automatic operation can cut your packaging costs.

"Machinery for Creative Fackaging"

ENGINEERING CO.

1900 HARRISON AVENUE ROCKFORD, ILLINOIS New York Office, 370 Lexington Ave. SEPTEMBER 11-14

**BOOTH 103** 

CLEVELAND AUDITORIUM



#### change of address

Our move to larger and more modern plant and offices marks another milestone in the growth and progress of our organization.

Careful consideration was given to the selection of our new location. The fine planning which has gone into plant arrangement and exterior treatment makes ours a very efficient layout.

The new building is air-conditioned, has acoustical ceilings, tile floor coverings, excellent lighting and the most modern of plant conveniences.

Here is a building that has been built expressly for the manufacturing of the finest of lithographed and plain metal containers.

As we approach our 50th anniversary in the can manufacturing field we hope that we may have the pleasure and opportunity of serving your organization.

Complete manufacturing and engineering facilities are always available to your inquiries.



DESIGNERS AND MANUFACTURERS PLAIN AND LITHOGRAPHED METAL

OLIVE CAN COMPANY

METAL CONTAINERS CUSTOM OR STOCK DESIGNS 4700 N. OKETO AVENUE . CHICAGO 31, ILL.

### Why plastic packages sell



Crystal-clear case gives new distinction to best-selling cigars!

Apparently what the country needs is' a better package for a good cigar. When the manufacturers of Corina Cigars repacked their Corina Larks in Monsanto Lustrex, sales soared sky high! A few years ago, realizing the need for modern packaging, Corina decided to pack ten Corina Larks in a transparent styrene plastic pocket pack. Its immediate success prompted the use of the same material for a pack of 25, And today, a handsome "jewel box" molded of Monsanto Lustrex is giving new distinction to the box of 50 Corina Larks. The transparent case displays cigars to perfection at point of saleand encourages customers to buy by the box.

The package, with sturdy "safe door" hinges and three-dimension tobacco leaf design on top, is molded of Monsanto Lustrex by the Continental Plastics Corp., 2934 W. Lake Street, Chicago.

Because Lustrex styrene is so light-weight, durable and versatile, it is creating new sales-making packages every day—high-fashion containers for luxury merchandise and low-cost containers for food and dairy staples. Monsanto will gladly put you in touch with plastic packaging specialists who will help you work out your container requirements. Write Monsanto Chemical Company, Plastics Division, Room 652, Springfield 2, Mass.

Talk to Monsanto about packaging your products in

#### LUSTREX'

styrene plastic



Monsanto also supplies polyethylene and cellulose acetate for profitable packaging.

LUSTREXI REG. U. S. PAT. OFF.

### more of everything, every day!

Transparent bandbox displays bath crystals as a gala gift!

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How glamorous packaging can give unique sales appeal in a highly competitive market is once again dramatically demonstrated! Imaginative use of Monsanto Vuepak makes this kit of bath crystals all but irresistible!

Vuepak is the Monsanto tradename for cellulose acetate. The material is beautifully transparent so the nine individual containers get full display and imprints colorfully with standard inks so the brand has elegant impact.

Package designers like to work with Vuepak because it forms at low cost into almost any desired shape. Further flexibility is gained because Vuepak combines so readily with cardboard or metal.

Small wonder Monsanto Vuepak is proving such a profitable packaging material for hundreds of drug and cosmetic items! In addition to its other qualities, it is light in weight to cut down shipping expense—yet has exceptional rigidity.

The package pictured is fabricated for Shulton, Inc., by the Union Specialty Co., 57 Main St., Bloomingdale, New Jersey.

Monsanto will gladly put you in touch with specialists in plastics packaging who will help you with your own container requirements. Write Monsanto Chemical Company, Plastics Division, Room 652, Springfield 2, Mass.

Talk to Monsanto about packaging your products in

#### VUEPAK'

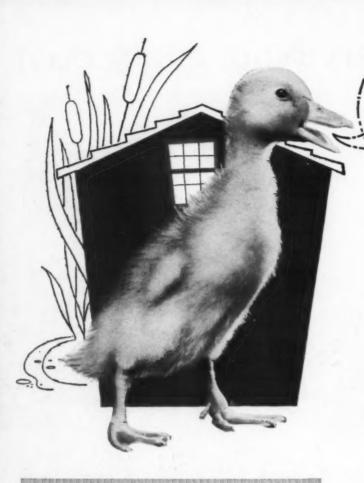
cellulose acetate



Monsanto also supplies styrene and polyethylene for profitable packaging.

\*VUEPAK: REG. U. S. PAT. OFF.





WADDLE I
BE WRAPPED IN?
WEST CARROLLTON
GENUINE VEGETABLE
PARCHMENT,
OF COURSE!

You can take it straight from the duck's mouth that for low-cost assurance of having your product reach the consumer with its flavor and freshness intact, all you have to do is to choose West Carrollton Genuine Vegetable Parchment.

Wrappers made of this fine, timeproven parchment have all the qualities poultry wrappers should have: great strength—wet or dry; greaseresistance; no taste; and no odor. And they will prove to be good salesboosters for you, too. Why not send for samples and information?

West Carrollton
GENUINE VEGETABLE
Parchment

WEST CARROLLTON PARCHMENT COMPANY WEST CARROLLTON, OHIO

> SALES OFFICES: New York, 99 Hudson St. Chicago, 400 W. Madison St.

BUTTER WRAPPERS

BUTTER TUB LINERS

MILK & ICE CREAM CAN TOPS

MEAT WRAPPERS

LARD CARTON LINERS

VEGETABLE SHORTENING CARTON LINERS

LINERS FOR MEAT TINS

TRI-WRAP FOR SMOKED MEATS

SLICED BACON WRAPPERS

FISH FILLET WRAPPERS & INSERTS CELERY WRAPPERS

CHEESE WRAPPERS

POULTRY WRAPPERS

OLEOMARGARINE WRAPPERS

TAMALE WRAPPERS

BAKERY PAN LINERS

BUTTER BOX LINERS

PARCHMENTIZED KRAFT PLAIN OR PEBBLED

RELEASE PARCHMENT

GREETING CARD

GLOSS-WRAP for smoked mosts (single, double or tri-wrap)
AVENIZED • MYCOBAN • QUILON & DRY WAXED PARCHMENT
CLEAN FOOD PAPER—For Delicatessen and Grocery Stores,
elso Fish and Most Markets

BD

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# When it's cartons "by the roll"...it's BBD Ink in the fountains

BD FLEXOGRAPHIC and GRAVURE INKS for PAPER and BOARD

HYDROTONE —Water-type matte-finish ink for flexographic or gravure printing and coating of boxboard, kraft and other absorbent papers. Withstands corrugation, dry and wet waxing.

VELVATEX - Alcohol-soluble matte-finish ink for flexogaphic or gravure printing of featherweight tissue, other papers and paperboards. Withstands corrugation, has high water-resistance, can be waxed. Does not curl or wrinkle even lightest tissue.

FLEXOKRAFT — Pigment-dye flexographic ink designed especially for kraft papers, linerboard, boxboard, gassine, etc. Has exceptional color strength.

EXCELLOPAKE -100% pigmented flexographic ink for brilliant, opaque effects on kraft, sulphite, bond papers, glassine, boxboard. Lightfast.

There is more than one good reason why so many leading flexographic and gravure printers of boxboard and paper use BBD Ink.

One reason is in the ink itself, "Tailor-made" for every end-use specification, and quality-controlled from start to finish of its manufacture, BBD Ink can be counted on for consistently outstanding results...job after job. When you use BBD Ink you get extra color strength, extra clean printing, extra level and opaque coverage, extra smooth performance on press. And you also get a bonus in the form of expert technical help... rendered by "shirt-sleeve" field specialists with plenty of practical pressroom experience. You can rely on them to tackle your printing problems right at the press...help you turn out top-quality work at high production levels.

Whatever your need—for pigment, dyestuff or pigment-dye ink ... for ink to print with high-gloss, regular or soft-matte finish ... for ink to stand up under waxing, varnishing, die-cutting, creasing, corrugating or folding—let BBD supply the one right ink to do your job best.

more information about any of BBD Inks—and the service of a stilleved" BBD field technician act our nearest office or write dito Bensing Bros. and Deeney, 3301 sing Park Ave., Philadelphia 29, Pa. Bensing Bros. and Deeney

Flexographic Ink Specialists

PHILADELPHIA · CHICAGO · SAN LEANDRO, CAL.

CAMBRIDGE, MASS. · MONROE, LA.

CANDRIDGE, MASS. · COLORA, LTD.

RELEGISHM. Berne, Switzerland.









# NOBODY HAS AS MUCH EXPERIENCE AT MOLDING POLYETHYLENE AS



The logical molder for you to consult regarding that product or package of yours which is to be made of polyethylene is Tupper. Tupper has done more than any other molder to make molded polyethylene a practical reality.

Aside from having designed, patented, and promoted successful seals, closures, and dispensers for polyethylene containers, the Tupper Corporation has vast experience in every phase of polyethylene packaging and polyethylene injection molding. This experience will be of major importance in improving your product, in reducing your costs, when Tupper goes to work for you.

Tupper's combination of experience, technical ingenuity, and the most modern equipment is at your service for the custom molding of your product in polyethylene. You can do no better than the best ... and the best at molding polyethylene is Tupper!



Tupper Seals are air liquid-tight flexible co The famous Pour All Por Top covers are des for easy dispensing. are made in sizes to Tupperwere contains







When equipped with Tu per Seals, Tupper Caniste Sauce Dishes, Wonder Bowis, Cereal Bowis a Funnels in various sizes a the most versatile reusel containers you have

#### UPPER!

#### UPPER CORPORATION

ufacturers of - CONSUMER, INDUSTRIAL, PACKAGING AND SCIENTIFIC PRODUCTS

Address all communications to: Dept. MP-7

ARE FULLY PROTECTED MINISTERS About 150 United States and foreign patents and patents applied for, plus numerous trademarks and copyrights, cover the design and manufacture of the various types of Tupper Seals and other Tupper Products. Unauthorized manufacture of items covered by Tupper patents will subject infringers to prosecution. 





### How to Improve Your Packaging Operations..

SEND FOR the new Paisley 4-page Packaging Adhesive Guide. It contains valuable information about the most modern Adhesives ever designed for specific sealing operations in the packaging field! Subjects include Carton Sealing Glues, Case Seal Glues, Bottle Label Glues, Can and Tube Labeling, Resin Emulsion Adhesives and Wrapping and Bundling Adhesives.

Paisley's popular Technical Service Bulletins covering these subjects in complete detail are also described. Facts are presented concerning our scientific laboratory control methods of manufacture and on the Paisley Adhesive Operation Data Sheet which in effect places all of our extensive modern laboratories and skilled technical staff at your command! This Scientific Adhesive Service assures you the ONE best Adhesive for the job!

All this valuable information and service is FREE. Will you ask for your Packaging Adhesive Guide on company stationery, please?



SEND FOR FREE COPY NOW!

# PAISLEY PRODUCTS INCORPORATED

630 WEST 51st STREET, NEW YORK 19, N.Y. . PHONE JUDSON 2-3790
1770 CANALPORT AVENUE, CHICAGO 16, ILLINOIS . PHONE CANAL 6-2219

Manufacturers of Glues Pastes, Resin Adhesives, Cements and Related Chemical Products



### She sees it first on NIBROC° WHITE



... is just one example

Nibroc White—a paper especially engineered for highest brightness and eye appeal; for ease of handling, printability and strength!

Whether your specialty is flour, coffee, sugar, rice, cake mixes, co-coa, corn meal, dog-food...you can upgrade your package, boost its visibility with Nibroc White in machine finish, super-calendered,

embossed, or super-calendered and embossed paper.

#### LET US HELP YOU

We're looking for problems—your problems—in packaging. We'd like to point out the sales advantages of switching to Nibroc White. We will do exploratory work on new white grades for specific packaging requirements.

Write to our Paper Sales Division, Dept. DR-7, in Boston.



COMPANY, Berlin, New Hampshire General Sales Office: 150 Causeway Street, Boston 14, Mass. Mills: Berlin & Gorham, New Hampshire

# This is

# **NIBROC'WHITE**

MACHINE FINISH BASIS 65\*/500



Complete Line
of CLEVELAND CONTAINERS



CLEVELAND CONTAINER

available to meet any particular problem.

Why pay more? For good quality . . . call CLEVELAND!

COMPANY

6201 BARBERTON AVE., CLEVELAND 2, OHIO

 ALL-FIBRE CANS - COMBINATION METAL AND PAPER CANS - SPIRALLY WOUND TUBES AND CORES FOR ALL PURPOSES

CLEVELAND CONTAINER CANADA, LTD.

Plants & Sales Offices: Sales Offices: MONTREA

NEW YORK CITY WASHINGTON, D. G ROCHESTER, N. Y. WEST HARTFORD,



# if it's worth a <u>wrap</u>



### ... wrap it right in

Yes, Revere Copper and Brass Incorporated is in the foil business... and in a big way... thoroughly equipped to help you with your packaging problems. And as we found out by talking to many of you at the Packaging Show, there are plenty of you manufacturers with packaging problems. That's where, because of the experience of our Research and Development Laboratories, we believe we can be of help to you.

Ad Re 23



# REVERE FOIL

Why not tell your troubles to one of our Technical Advisors who will be glad to call at your convenience? Revere Copper and Brass Incorporated, Executive Offices, 230 Park Ave., N.Y.C. Sales Offices in 33 Principal Cities.

Manufacturers of aluminum foil, plain, colored, embossed, beat seal and other types of specified coatings. Also aluminum foil laminated to tissue, paper, board, film, and a variety of other backing materials.



foil

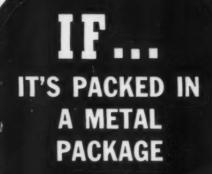
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# THEN

MORE THAN 55 YEARS
OF METAL PACKAGING
EXPERIENCE SHOULD
MEAN SOMETHING TO
YOU

# NOW ..

IS A GOOD TIME TO DO SOMETHING ABOUT

Heekin PRODUCT

cans

since 1901

THE HEEKIN CAN CO. PLANTS IN OHIO, TENNESSEE & ARRANSAS - SALES OFFICES; CINCINNATI, OHIO; SPRINGDALE, ARRANSA



#### CONTROLLED QUALITY ...

from tree, to pulp, to paper, to conversion, to customer — adds up to superior FROSTKRAFT packaging

Every FROSTKRAFT bag and corrugated container is the product of uncompromising quality control by Olin Mathieson . . . control which extends every step of the way from seedling to finished product.

Olin Mathieson operates vast reserves of prime Southern pine, modern sawmills, pulp and paper mills, converting plants...all producing at top efficiency. By uniting natural resources with manufacturing — forming one

continuous industrial operation — every toughtempered FROSTKRAFT bag and container is produced under controlled conditions to meet Olin Mathieson's rigid standards of excellence.

Olin Mathieson's long experience in cellulose chemistry, paper making and packaging is at your disposal. Your FROSTKRAFT representative will bring quick, capable assistance in solving your kraft packaging problems. Why not call us today?



FROSTKRAFT
paper products
seem recourts process

# if it's worth a wrap



# ...wrap it right in

Yes, Revere Copper and Brass Incorporated is in the foil business... and in a big way... thoroughly equipped to help you with your packaging problems. And as we found out by talking to many of you at the Packaging Show, there are plenty of you manufacturers with packaging problems. That's where, because of the experience of our Research and Development Laboratories, we believe we can be of help to you.

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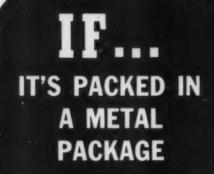


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Manufacturers of aluminum foil, plain, colored, embossed, best seal and other types of specified coatings. Also aluminum foil laminated to tissue, paper, board, film, and a variety of other backing materials.





# THEN

MORE THAN 55 YEARS
OF METAL PACKAGING
EXPERIENCE SHOULD
MEAN SOMETHING TO
YOU

# NOW ..

IS A GOOD TIME TO DO SOMETHING ABOUT

Heekin PRODUCT CANS

since 190

THE HEEKIN CAN CO. PLANTS IN OHIO, TENNESSEE & ARKANSAS—SALES OFFICES; CINCINNATI, OHIO; SPRINGDALE, ARKANSAS



#### CONTROLLED QUALITY ...

# from tree, to pulp, to paper, to conversion, to customer — adds up to superior FROSTKRAFT packaging

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Olin Mathieson's long experience in cellulose chemistry, paper making and packaging is at your disposal. Your FROSTKRAFT representative will bring quick, capable assistance in solving your kraft packaging problems. Why not call us today?



FROSTKRAFT

paper products

**OLIN MATHIESON CHEMICAL CORPORATION** 

you can't teach an old dog new tricks . .

# CAN YOU TEACH OLD CONVERTING MACHINERY NEW METHODS?

You shouldn't try, if it means spending more time converting machinery than paper. That's usually the case with obsolete equipment. It's far more costly in time and results in much lower productivity than a new machine.

Since 1919, West Engineering Company has been designing and building ingenious special machinery to solve your problems. West works with an eye on the future demands of a machine. It's time to take stock of your machinery. Let us help you convert all your production into real profit.

Tell us your problem . . . we have a plane at your service for factory visits. Write, phone or wire . . .

some of our special machinery for paper and textile converters:



our famous Multiwall-Bag Printing Press



Open Mesh Stringing and Knotting Machine

### west

Dept. S., Vawter Ave. on C&O Ry Richmond, Va. • Phone 7-3057



Mailing Bag Making Machine



Multiwall Bag Sewing Table





**Banding Machine** 



A NEW
CAN...
FOR A NEW
PRODUCT



designed and produced for Pillsbury by

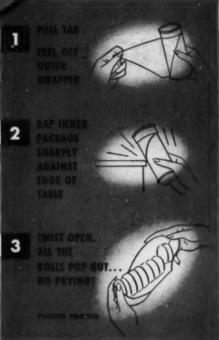
R.C.CAN

#### OPENS IN A JIFFY! EMPTIES ENTIRE CONTENTS!

Pillsbury wanted a new package for their biscuits and new cinnamon rolls . . . R. C. Can produced it, and are currently manufacturing cans for both products in great quantities.

The package had to be (1) simple enough in design to open easily without the use of any tool, (2) strong enough to hold more pressure than an auto tire, (3) efficient enough to discharge the *entire* contents quickly and easily, and (4) sealed well enough to reach the home kitchen-fresh as the day it was packed.

The Easy-Open Pull Tab Container has a double-foil moisture and grease barrier—the foil lining and the foil label. It opens in a wink... pull the tab, rap the package on the table edge—it's open! Completely, too! No rolls in the ends to pry out.



ANOTHER PACKAGING PROBLEM SOLVED BY R.C. CAN-GINEERING



#### CAN COMPANY

MAIN OFFICE 9430 Page Blvd., St. Louis 14, Mo.

Branch Factories: Arlington, Tex.; Rittman, O.; Turner, Kans.

SALES OFFICES: C. E. DOBSON, 1003 Carondelet Bldg., New Orleans 12, La. \* R. C. CAN CO., 225 West 34th St., New York, N. Y. \* L. C. MORRIS CO., P. O. Box 3218 Sta. F., 1156 Daton Dr., N. E., Atlanta 6, Ga. \* S. W. SCOTT, 608 McCall Bldg., Memphis 3, Tenn. \* W. L. BENNETT, 126 S. Third St., Minneapolis 1, Minn. \* CAN SUPPLY CO., 1006 W. Washington Blvd., Los Angeles 15, Calif.

# TOUGHNESS...and glamour, too! with AVISCO\* 450 cellophane



When your package has to *take* it, be glad for the bump-taking toughness of Avisco 450 cellophane.

Made extra-tough and thick, 450 stands up stoutly under the battering a bundle must endure en route from factory to store to self-selection counter.

Yet with all its extra toughness, it still gives you cellophane's perfect clarity and brilliance.

There are, of course, other packaging requirements that call for thinner types of cellophane. American Viscose manufactures them, too. 48 different types of cellophane carry the AVISCO label.

The point is, there's more than one grade of Avisco cellophane . . . and there's a *right* one to sell your product.

AND REMEMBER: Cellophane is trouble-free as film can be on high-speed packaging machinery. No other film can match its machine-working—and printing—qualities.

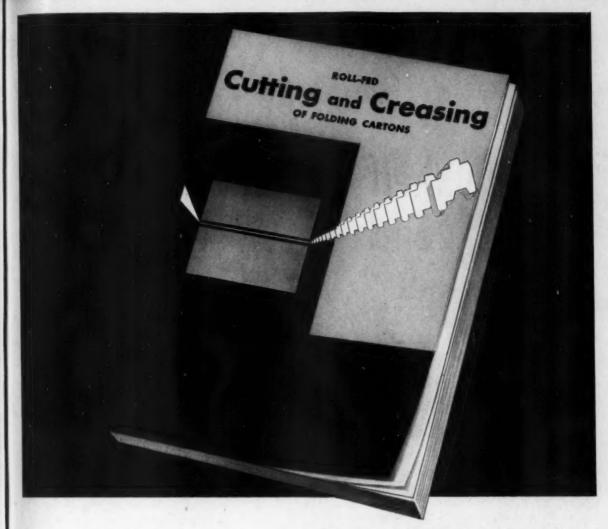
American Viscose Corporation Film Division 1617 Pennsylvania Blvd. Philadelphia 3

\*Trademark of American Viscose Corporation



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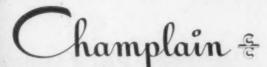
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### A comprehensive new 48-page book describes and discusses in detail equipment and techniques of web-fed die-cutting of folding cartons

This unusually detailed and well illustrated book takes you step by step through the operation of new roll-fed cutting and creasing equipment. Discusses die making techniques, automatic stripping, and contains specific examples of work being produced with accompanying production data. Schematic drawings, photographs and blueprints graphically illustrate equipment, stripper

make-ready and die layouts. The clear, easy-to-understand text explains the development of roll-fed cutting and creasing equipment, its refinement, and efficiency. Write today on company letterhead; a copy will be sent at once. Champlain Company, Inc., 88 Llewellyn Ave., Bloomfield, N. J. Chicago Office: 520 N. Michigan Ave., Chicago 11, Ill.





Champlain's new Rotogravure Ink Bulletin is also available. Request it in your letter, if wanted.

Champlain manufactures a complete line of rotogravure, aniline, rotary letterpress and allied equipment for packaging and specialty printing.

**3614** 

off the shelf

MODERN PACKAGIN

encyclopedia iss for 1956

# hard at WORK

Most of the material in the Modern Packaging Encyclopedia Issue is work data . . . information which companies that make or utilize packaging can put to practical use, day-in and day-out.

This 777-page volume gives complete coverage to such important subjects as the characteristics of packaging materials and establishing package specifications. Packaging in paperboard, flexible and rigid films, metal and glass are discussed exhaustively, as are all important package decorating techniques. Of course, the principles for safe, economical packaging and shipping of industrial and military merchandise are explained in detail, too.

Countless hours of hunting for sources for materials, machinery, equipment and such custom services as contract packaging, laminating and container decorating can be saved by referring to the world-famous Directory Section. It is thoroughly indexed for fast reference. The many ads also help lead you to qualified suppliers.

On the shelf your Modern Packaging Encyclopedia does you no good; at work it can be one of your most valuable production tools. Use it often!

#### MODERN PACKAGING

575 Madison Avenue

New York 22, N. Y.

#### Don't Overlook the Helpful Packaging Charts

Important charts in the Encyclopedia summarize the properties of packaging films, aluminum foil and foil laminations. Other charts give detailed characteristics of molded and sheet plastics that are used in packaging.

These goods sell on sight ...

in CELLOPHANE



in POLYTHENE

in ACETATE

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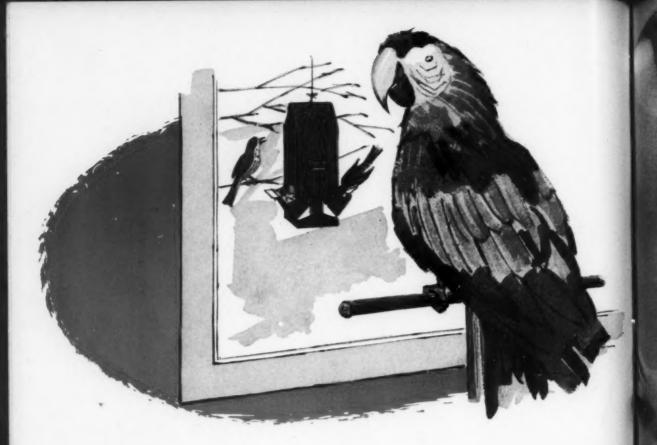


BRITISH CELLOPHANE LIMITED

DESCRIPTION OF PURPLES TRANSPORTED COMPANIES COMPANIES

Commercial Officer 19-13. CONDUIT STREET, LONDON WIL ENGLAND

\*CELLOPHANE is the registered trade mark of British Cellophane Limited, in the following countries:
Great Britain, Australia, Ceylon, Cyprus, Denmark, Eire, Gibraltar, Hong Kong, Iceland, India, Januaica,
New Zealand, Pakistan, Northern Rhodesia, Southern Rhodessa, Trinidad and Tobago, and the Union of S. Africa



# What will they think of next?

Good question! What American package designers think of next will, in all probability, be even more useful and novel ways to make packaging a real selling function.

Many of these designs will be created by Gardner packaging specialists. Some will be created elsewhere, and then produced at Gardner. Whether it's a new and striking package you are after—or a highly skilled and experienced source for your present package needs—time given to a Gardner representative will be very well spent. Why not write?



Many of America's greatest products go to market in "Cartons by Gardner"

GENERAL OFFICES: Middletown, Ohio—PLANTS: Middletown, Ohio; Lockland (Cincinnati), Ohio SALES OFFICES in Chicago, Cleveland, New York, Philadelphia, Pittsburgh, St. Louis, Greensboro, N.C.

#### THE GARDNER BOARD AND CARTON CO.



Manufacturers of Folding Cartons and Boxboards



FROM THE GARDNER GALLERY OF FAMOUS AMERICAN PACKAGES



# NASHUA PRINTED PACKAGING

Give your product the powerful merchandising appeal of Nashua Printed Packaging. Ask to have a Nashua representative call and show you "The Power of the Package". Nashua Corporation, Dept. PM-7, 44 Franklin Street, Nashua, N. H. Sales offices in New York, Philadelphia, Chicago, San Francisco, and Peterborough, Ontario.

40 YEARS OF CREATIVE PACKAGING

Printed Film • Waxed Wrappers • Bax Papers • Bax Stays • Gummed Papers • Heat Seal Papers • Flocked Products • Party Papers • Printed Bands • Corrugator's Tape Sealing Tape • Moistening Machines • Technical Paper Products





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## **MODERN PACKAGING**

# Behind the packaging decision

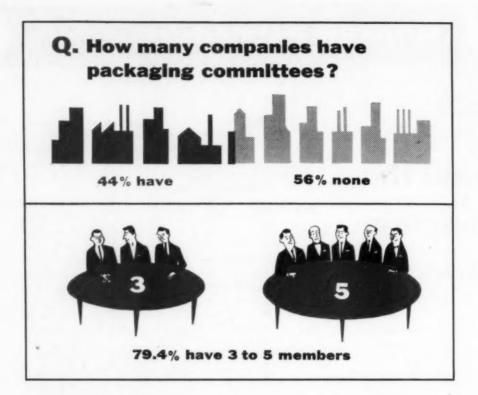
A new study probes deeply into attitudes and practices in the largest package-consuming industry and comes up with some new findings of broad significance New light on some of the most important "unknowns" in packaging is shed by a complete evaluation of a Folding Paper Box Assn. survey of the grocery-manufacturing industry, presented here in detail for the first time.

The survey was not restricted to folding boxes. Evidence as to the share of the sales dollar taken by packaging in this, the largest of all package-consuming industries, and an insight as to how packaging decisions are approached and made to-day are among the findings that will be of value to all packagers.

Among the conclusions:

- ► Food manufacturers are now spending, on an average, 10% of their gross sales income on packaging.
- ► They are more interested in what packages will do to increase sales than in what they cost.
- ▶ In general, they feel that a change in consumer packaging can of itself bring a measurable increase in sales.
- ▶ Nearly half of the food manufacturers—large and small—now have packaging committees and





more than half use some kind of research technique to pre-test new packages.

► The sales manager, apparently, is the most influential in making decisions for packaging change.

The study represents the knowledge and opinions of top executives in 307 food manufacturing or processing companies, comprising \$28 billion worth of the \$51-billion food-manufacturing industry. The facts were obtained in personal, depth interviews.<sup>1</sup>

The interviews were made in 25 states and the District of Columbia, and the manufacturers reached included some of those responsible for virtually all products sold in food stores, including soaps and detergents, tobacco and beverages.

#### The cost question

Aside from Modern Packaging's pioneer attempt to arrive at figures for evaluating packaging costs more than two years ago,<sup>2</sup> the present study represents one of the first instances of a broad statistical approach to tackle the what-does-packaging-cost question. It should be noted that the 10% cost figure is based on answers of less than one-third of the total packaging executives interviewed in the

FPBA study. This would seem to indicate, as Modern Packaging discovered also, that there is not only some reluctance to reveal cost figures, but still the imponderable question: "What is packaging cost?" Accountingwise, all companies do not include all of the same items, which makes a true picture hard to get.

Virtually the same yardstick was used for measurement in both studies. Researchers asked: "What percentage of your company's total sales volume would you say goes to total packaging costs?" The MODERN PACKAGING study specified "percentage of manufacturer's selling price." Results are not entirely comparable, because the MODERN PACKAGING report was broken down into a number of product groups, whereas the FPBA study lumps for an average all products sold in food stores.

The wide variations among distinctly different food-product groups, ranging as high as 24.1% and as low as 6.5% in the Modern Packaging study, nevertheless do not disagree with the FPBA findings of an over-all 10% average packaging cost for all foods. However, any figure in this respect probably needs qualification. Says the survey analyst, "Obviously, any averages based on these data may vary widely from the figures for an individual company because of the wide operating differences in the numerous divisions of the food industry."

<sup>&</sup>lt;sup>1</sup> The survey was conducted, for the Folding Paper Box Assn. of America, by Den White, Inc., New York.
<sup>2</sup> See "What Does Packaging Cost?," Modern Packagine, March, 1954, p. 125.

Results of the two studies together should provide useful stepping stones for further progress into this subject.

If the 10% figure may be taken as a guide, food manufacturers appear to be spending less of their total sales dollar for packaging than for selling and promotion costs. The 31% who answered this question reported outlays for sales and promotion expense averaging 19% of total sales return.

#### Package appearance

Significant of present trends was the ranking of "display value—customer attention" rather than cost as the "one most important factor"—other than protection of product and product quality—in the decision of the largest number of food and grocery manufacturers to change or develop a new package.

Cost actually ranked in seventh place on the list of elements influencing the decision to change or develop a new package. And all six of the elements listed ahead of cost are closely related to display value and consumer attention—brand identification, visibility of product, appetite appeal, display value for handling, stocking facility and advertising value.

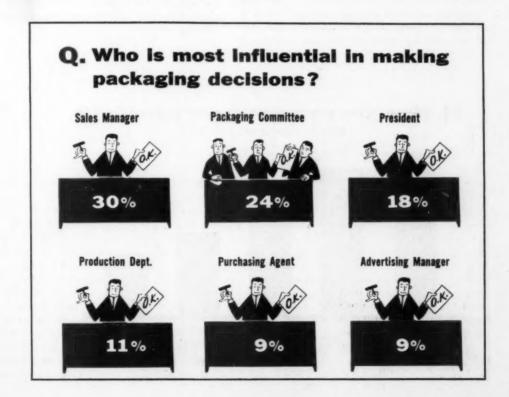
This emphasis on display reflects, too, the keen interest of food manufacturers today in such fac-

tors as proper shelf sizes, display facings, recipes, related-item selling, deals and special offers. It helps to explain the eagerness for statistics on consumer reactions to such things as multi-unit packs, larger or smaller sizes, new package forms (squeeze bottles, aerosols, etc.) and combination-package offers.

Ranking below cost in influence on packaging decisions are: adaptability to packaging machinery, special-inducement deals, larger sizes of multi-unit packages.

#### Allocation of costs

The obvious importance attached to display value raises new questions about how packaging costs should be allocated in company budgets. Many of the packaging executives interviewed stated that it was their personal opinion (regardless of their own company policy) that more than one-fifth of total packaging costs today should be allocated either to sales or advertising expense, but that the remaining portion (77%) of all packaging costs rightfully belongs in the category of production expense. Quite a few firms reported that they are already allocating costs of some phases of packaging to items other than what are normally considered "production" or "manufacturing expense"—principally to sales and advertising. Among the



costs mentioned under these classifications were those of design, finished artwork, development, market research and engravings.

Allocation of packaging costs	
	% of firm. allocating to packag production
Description	expense
Filling, gluing, labeling, closing, etc.	82
In-plant spoilage & product waste	78
Package materials & manufacturing	77
Engravings	56
Development	51
Finished artwork	50
Design	48
Marketing research	32

The primary reason for new packages or package changes, according to 70% of the respondents, is to increase sales. A surprisingly small number (3%) gave as the primary reason for change "to reduce packaging cost." This response fortifies the pattern of other findings; namely, that the prime consideration in any food packaging today (beyond protection of product and product quality) is "display value." Apparently food packagers are not quibbling over package prices if convinced that a better package appearance is necessary to get more sales.

At the same time, new packages often actually reflect lower packaging costs. About one-sixth of all companies reporting said that their most recent new package did reduce costs, even though that may not have been the primary objective of the new package.

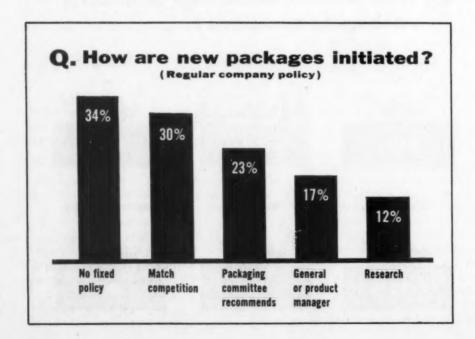
#### Packaging organization

On the question of organizing responsibility for packaging decisions, the FPBA survey again bears out Modern Packaging's conclusions from its own study of the subject: There is no one pattern that fits any two companies exactly.

When the FPBA survey was initiated, the first approach was by personal calls on company presidents, asking them to specify the person or persons in their respective companies who were chiefly responsible for packaging. The quick response and cooperation from some of the country's top business heads indicated a high level of interest in packaging on the part of top management, and the people designated for the interviews on the basis of being chiefly responsible for packaging (except in companies that have packaging directors and committees) included some presidents themselves, as well as executive vice presidents, vice presidents in charge of sales, managers of marketing promotion, sales managers, technical laboratory men and purchasing agents.

The packaging committee approach seems to be making rapid headway as a means of coordinating packaging functions. Close to one-half (44%) of all leading food and grocery manufacturers re-

See "Packaging Organization," MODERN PACKAGING, March, 1956, p. 145,





ported that they now have a packaging committee. The great majority of these committees (79.4% of them) have from three to five members.

#### Members of packaging committee

(In those companies having a packaging committee)

Title -	% of companie where member
General sales manager or sales vice	
president	63.0%
President	53.3
Executive vice president	42.2
Advertising manager	41.5
Purchasing agent	40.0
Production manager	26.0
General manager	22.2
Package engineer	15.6
Plant superintendent	12.6
Merchandising manager	9.6

More than half of the committees (58%) have no regularly scheduled meetings, but convene "when there is a packaging problem" or "when we are considering a package change." The remaining 42% said they do have a regular schedule of meetings, but there is no uniformity of frequency. Frequency ranges all the way from weekly to annually.

A good clue to the question of who makes packaging decisions was given. The sales manager was credited by more companies (30%) with being "most influential in making the final decision" to adopt a new package than any other individual or factor. The packaging committee was cited as "most influential" by the next largest group (24%), although this was reported for only a little more

than half of those who stated that their company has such a committee.

The importance of top management in making packaging decisions was reflected by the next largest number of firms (18%) that stated the president was "most influential."

#### Most influential in final decision on package

Position	% of replies*
Sales manager	30
Packaging committee	24
President	18
Production department	11
Purchasing agent	9
Advertising manager	9
Legal counsel	1
Miscellaneous	19

\* Adds to more than 100% because of multiple answers.

Interesting is the large percentage under "miscellaneous," indicating that the packaging decision is still not a clear-cut matter for any one person or department. It is also interesting to note that a fourth of the executives interviewed (26.7%) had "all or final" responsibility for the packaging of their companies' products, while an additional 26.1% had "general or advisory" responsibility.

In only about one-fifth of the companies (22%) did the president specify the executive responsible for purchasing as being "the one who has primary responsibility over packaging" and even here it is possible that purchasing responsibility was confused with planning responsibility.

It may be deduced that about half of the food packages that reach the market today are the result

of planned procedures—reflecting, perhaps, the increasing reliance on product and market research methods in today's economy. About 49% of the companies reporting stated that their most recent package was "planned" on the basis of some kind of study or analysis. The remainder (47%) said that changes came about as the result of some unplanned incident or some factor (4%) about which they could not answer.

Stated another way, more than one-third (34%) stated that their company has "no fixed policy" for initiating changes, with only a few (12%) saying they schedule laboratory and marketing research reports as a basis for making changes.

Methods of initiating			
package changes	%	of	replies
No fixed policy			34
Try to match or excel packages of			
competitors			30
Depend on recommendations of packaging committee			23
Depend on recommendations of general			
(or product) manager			17
Schedule regular, periodic laboratory and marketing research reports on each pack-			
age as basis for making changes			12
Miscellaneous			3

<sup>\*</sup> Adds to more than 100% because of multiple answers.

#### Planning and frequency

Many companies appear to be using some kind of check list today in their package planning. Three-fifths of the companies reporting said they had definite check lists or policies governing their consumer packaging with respect to "protection of product" and "information contained on or in the package."

About half of the companies said they have policies governing (1) color, (2) trademark, (3) size, shape and construction, and (4) design. Only about one-third, however, have a definite policy in regard to (1) illustration, (2) product-use data, (3) cost and (4) retailer requirements.

Food manufacturers, apparently, are generally using research methods to pre-determine package acceptance. More than 54% of the respondents said their companies have a policy of pre-testing new or revised packaging, although a good many say they use only their sales figures on previous packages as a guide to acceptance.

More than four-fifths (80.2%) of the food and grocery manufacturers reporting said that they had introduced a new package during the last year—again significant of the ability of the swift-moving food industry to cater to the insatiable demand of a public taught to expect constantly new variety and convenience in food packaging.

The average lapse of time since the last new package put on the market was 14 months. In the average are only a few companies (3%) that have not introduced a new package in over five years.

Significant, too, was the indication that 70% of the new packages were for existing products and the rest for totally new products.

The generally accepted theory that any new package outsells an old one is [Continued on page 167]



# Upgrading for profit

Lexol's latest redesign puts

G.A. 50 Glove Wash on the counter in
a polyethylene bottle to attract sales,
cuts shipping weight by two-thirds

The experience of a single successful package change often is sufficient to start a manufacturer on a whole program of package upgrading. The Lexol Corp., Caldwell, N. J., became keenly aware of the advantages of improved packaging about two years ago when it changed its Lexol Leather Conditioner package from an old-fashioned, poorly labeled bottle to a tall, cylindrical bottle with a smart, modern label,\* worked up by one of the country's leading designers.

The success of the Lexol package drew attention to the drab-looking package the company was then using for its "G. A. 50" Glove Wash—a heavy, square-type bottle containing 6-oz. of product selling for 50 cents. G. A. 50 is a special preparation for the laundering of gloves of leather, wool or fabric.

While the product had good acceptance, dealers resisted handling it because of the heavy package and because there was nothing about it to induce counter display—particularly in smart glove departments where the product is most frequently sold.

After testing the feasibility of polyethylene from the standpoint of compatibility with the product, the company decided to change to a new type of polyethylene container with phenolic plastic screw cap in a 4-oz, size, to sell for 59 cents.

The new polyethylene container has many advantages, apparently. Retailers like it because it is easy to handle and displays in small space. The old package rarely got on the counter. Consumers are so attracted to the smart-looking new package that it has become an impulse item at the glove counter. Its unbreakability is an attraction to travelers.

Even more impressive, from the company's stand-



Smart appearance and convenience induce retailers to display trim new polyethylene package in glove departments as an impulse item. Drab old package stayed under the counter.

point, is the saving in shipping weight, due partly to the change to polyethylene and partly to the reduction of contents. Whereas a carton containing three dozen units formerly weighed 33 lbs., the new shipping carton containing the same number of bottles weighs only 11 lbs., 4 oz., a reduction of nearly two-thirds.

As a result of this savings, it has been possible to increase the dealer's profit margin.

In appearance, the G. A. 50 Glove Wash package has been given a modern, [Continued on page 169]

Credits: Polyethylene containers by Bradley Container Corp., Thompson St., Maynard, Mass. Display carton by Amco Paper Box Co., Towaco, N. J. Label design by Kay Chin, 425 Riverside Dr., New York.

Space-saving counter display carton holds 12 of the new bottles. Complete, it weighs 11 lbs., 4 oz. Former pack of 12 bottles weighed 33 lbs. Saving in shipping cost is passed along to the retailer in a higher profit margin for him.



# These packages really function

Recently introduced paper packages which can be converted into actual, working fertilizer spreaders and cement mixers provide striking evidence of how far the trend has gone—even in lowcost, throw-away containers—toward packages that really do a functional job.

The newest of these packages employs ingenious construction to eliminate a great deal of the work involved in spreading fertilizer on a lawn or in combining the ingredients for making cement, mortar, plaster, etc. Although all of them differ in actual package construction, each uses the same idea: including, right in the package which contains the product, the additional parts for converting that package into a mechanical contrivance or

vessel that will make use of the product easier and more effective for the consumer.

In many cases, this can be a real cost saver for the customer—particularly the occasional user who no longer has to invest in a separate fertilizer spreader or rent or borrow a suitable mortar bin for mixing up a batch of cement.

#### Spred-O-Pak

The Spred-O-Pak fertilizer dispenser package has been developed and marketed by Agricultural Products Corp., Webster City, Iowa, for its lawn fertilizer. Basically, it is a one-piece heavy corrugated fibreboard container printed in red and green.

The carton is shaped somewhat like a hopper,

#### A package with wheels . . .

Component parts which convert carton into a wheeled spreader are packed in the rear compartment of the package. These include a paper tube for use as a handle, a wooden axle, two corrugated wheels and attachment parts.



Three unique new throw-away paper containers make it possible for the home owner to spread fertilizer or mix cement directly from the package, without the use of any other implements

with a series of small openings along the bottom edge, through which the fertilizer is gravity fed once a strip of protective tape is pulled off.

Inside a flat inner storage compartment along the rear edge of the hopper are packed two heavy corrugated wheels, 8 in. in diameter; a wooden axle; a length of spiral-wound paper tubing, and a small piece of wood shaped to fit into one end of the tubing. Nails, a set of metal wheel-attachment disks and an instruction folder are also included.

With these parts, the user can assemble his own wheeled fertilizer spreader. Pressure-sensitive tape is removed from openings on either end of the box and the wooden axle is slipped through them. Then the corrugated wheels are nailed onto the ends of

... a package that rolls



Wire handle inserted into small holes in metal ends of Plantrons Roto-Spreader and removal of label (background) creates a package which can be rolled along ground to dispense through perforations its 10 lbs, of concentrated lawn fertilizer.

the axle and the paper-tubing handle is fastened to the spreader by the short length of wood.

Once assembled, the spreader may be easily pushed back and forth across the area to be fertilized, with its contents being evenly distributed through the row of 16 perforations on the bottom. The turning motion of the axle is said to agitate the fertilizer and meter it out at the proper rate.

The Spred-O-Pak, priced at \$3.98 for 18 lbs. of fertilizer, said to cover a 3,000-sq.-ft. lawn, is sold in hardware stores, garden-supply sections of department stores and similar outlets.

#### Plantrons Roto-Spreader

Another new functional package for a fertilizer product is the roller dispenser which has been introduced by Forward House, Inc., div. of Olin Mathieson Chemical Corp., [Continued on page 193]

Credits: Spred-O-Pak: Cartons by Waldorf Paper Products Co., 2250 Wabash Ave., St. Paul 14, Minn. Paper tubes by Mullery Paper Packages, Inc., 293 Como Ave., St. Paul 3, Minn. Pressure-sensitive tape by Minnesota Mining & Mfg. Co., 900 Fauquier Ave., St. Paul 6, Minn. Plantrons Roto-Spreader: Contract packaging by Dumont Enterprises, Inc., Englewood, N. J. Cartons by United Can Co., Phillipsburg, N. J. Box-Mix: Cartons by Fibre Board Container Div., Robert Gair Co., Inc., 155 E. 44 St., New York 17.

#### Cement mixer

Mixing box can be used for making any of the 10 building mixes listed on front. Tray inside flanges of top carries directions and is removable. For use, water is simply added to contents and the mixture stirred with a hoe.



JULY 1956

# Twin-tube adhesive

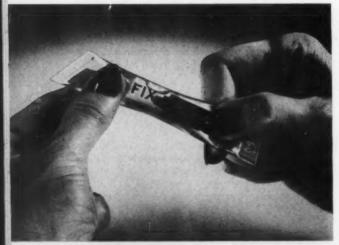
A further development
of the saran squeeze-to-use tube:
By keeping catalyst separate
from epoxy resin
until ready to apply,
it makes super-adhesive
practical for home use

Tube-in-tube holds two parts of the new adhesive—epoxy resin and amine catalyst hardener—separate until just before application. Inner tube, colored black, is lightly sealed at one end. Transparent outer tube (printed in red with name "Fix-Mix") is tightly heat sealed at both ends.

pair of small saran tubes, one inside the other, now makes it practical and easy for the amateur handyman to use epoxy-resin adhesives of great strength and durability. The tube-within-a-tube is a unique adaptation of a new form of dispensing unit package introduced recently, in single form, for such things as cosmetics and drugs.\*

Although epoxy adhesives have been used for some time in many commercial applications, their nature has, up to now, always made them too com-

\*See "Miniature Squeeze Tube," MODERN PACKAGING, Feb., 1956, p. 90.



**Squeeze** forces the colorless hardener out of its inner tube and into the outer container. Then the tube is worked back and forth to mix the two components thoroughly.

Snipping off end, after mixing is completed, converts slanted end of tube into applicator. Single-use mix is important, because action of catalyst will make epoxy rock-hard within an hour.



plicated for the average "do-it-yourself" fan to handle. The chief problem has been the need to add a special "hardener" or catalyst to the epoxy resin immediately before it is applied to the surfaces to be bonded together.

This hardening chemical must be thoroughly mixed with the epoxy and must be added in exactly the right proportion, in order to be most effective. But, once added, the mixture will quickly become rock-hard, so, under conventional methods of operation, the mixing process is not practical for small-scale operations.

American Metaseal Mfg. Co., West New York, N. J., however, has come up with an ingenious packaging solution to the problem and has just introduced "Fix-Mix," an epoxy adhesive in small single-portion units for the home market. The key to its new product is the use of two miniature saran squeeze tubes: one for the epoxy resin; the other, floating within the liquid resin, containing the catalyst.

The smaller inner tube contains the exact amount of amine catalyst needed for the 5-cc. portion of adhesive in the combined package. This tube is colored black, for visibility.

When the adhesive is to be applied, the user squeezes the tube between the fingers, putting pressure on the black inner tube. This causes the inner tube to burst open its thin, waxy end seal and forces out the catalyst into the epoxy resin. The next step is to knead the hardener and epoxy resin together with the fingers for about a minute. This will mix them together thoroughly in the correct four-to-one proportion and start the chemical action which gives the adhesive its remarkable bonding power.

Now, with the adhesive ready for use, a corner of the slanted end of the outer saran tube may be snipped off with a pair of scissors. The slanted end of the tube itself then becomes a handy applicator. The user is instructed to spread a thin layer of Fix-Mix on each of the surfaces to be bonded and press them gently together. Excess adhesive can be removed with acetone or a similar solvent. Since the mixed adhesive hardens rapidly, it must be used within an hour after mixing, but American Metaseal says that it may be preserved from four to five days in a deep freezer, if necessary.

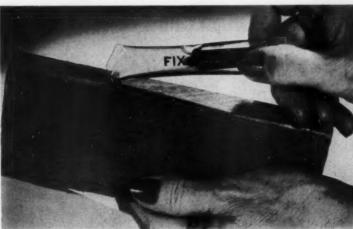
The bonds produced are reported to be much stronger than those possible with conventional adhesives for home use, with tensile strength of between 8,000 and 9,000 lbs. per sq. in. They are waterproof and apparently will withstand extreme variations of temperature.

One of the extra advantages of the epoxy resin Fix-Mix is its great [Continued on page 197]

Credit: "Unette" tubes produced and filled by Unette Corp., 280 Madison Ave., New York 16.

> Merchandising package for this three-for-\$1 item is simply explanatory folder with die-cut slots in cover.





By applying light coating of adhesive through cut opening, slanted edge can be used as spreader.



The new look in auto-supplies chain stores emphasizes self service, Gondolas in new Western Auto Supply outlet are crammed with packages of every description for car owners to examine,

# **Auto supplies**

Self-service trend in stores brings a new awareness of the potentialities of packaging in this \$2-billion market, which has been lagging far behind new-car gains

The number of cars and trucks on the road has reached a total that only a few years ago would have been considered fantastic. At the end of last year, there were an estimated 61 million vehicles in operation in the United States—which includes 50.9 million passenger cars and 10.3 million trucks and buses. During 1955 alone, a record-shattering eight million new vehicles were produced. For the sake of comparison: in 1951, only 51 million vehicles were in use.

More vehicles in operation would seem to mean greater sales of parts, accessories and other auto supplies. Strangely, this has not been the case. Although more than \$2 billion worth of these products were sold last year, this just about equalled sales in 1954—and 1954 came at the end of a chain

of steadily diminishing retail sales years for replacement parts and accessories. The industry's best year, in fact, was back in 1948.

With this situation to be met, it is no surprise to find the manufacturers and retailers of auto supplies taking a long, hard look at their marketing practices. Only now is self-service merchandising starting to make recognizable headway in the auto-supplies business. And, as has happened in other retail fields, that brings attention sharply to the package.

There are several reasons for the apparent paradox of a simultaneous rise in automobile production and decline in sales of automotive supplies. Cars are more expensive and more complicated than ever; their owners aren't so inclined to treat them as playthings to be tinkered with. Cars are replaced more rapidly than they once were—before they get a chance to start falling apart. (One reason for the record sale of auto supplies in 1948: the huge stockpile of patched-together pre-war cars still on the road.) Tires last longer. And new cars are increasingly accessory-laden, with many of the special auxiliary parts which once had to be specially purchased being supplied as original equipment.

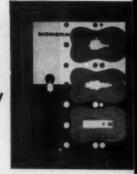
Obviously, it is necessary to stimulate new interest in non-original accessory equipment if declining volume is to be reversed.

#### The market

Several types of retailers offer accessories and parts to the car owner. He can purchase them in gas stations, in stores operated by the large tire companies, in auto-supplies sections of Sears, Roebuck and Montgomery Ward department stores or through the specialist auto-supplies chain stores, such as Western Auto Supply Co., Gamble-Skogmo, Inc., and White's Stores.

Although originally devoted almost entirely to automotive supplies, the specialist retailers have, in recent years, gradually broadened their fields of operations—spurred on both by the decreasing opportunities in orthodox auto-supplies retailing and the stepped-up sales of electrical appliances, hardware, garden supplies, sporting goods, housewares and the like. Western Auto Supply Co., in fact, estimates that only 34% of its total volume of

#### **Industry Survey**



sales during last year were in the automotive field.

The auto-supplies picture is not, however, entirely a dark one. Despite the trends we have noted, merchandising authorities agree that there is still opportunity for growth in this field, increasingly aided by the growing movement toward self-service selling.

Although, in most cases, this does not imply the arrival of the auto-supplies "supermarket," it does reflect the increasing trend to self selection—with packaged, price-marked items on display on counters or gondolas for customers to select by themselves and carry to a cash register. Some auto supplies are fairly complicated, of course, and may require the services of sales clerks. With a semi-self-service arrangement for less-complicated items, these men can devote more of their time to selling parts which need to be explained and described personally.

For self service of any degree, self-selling pack-



All-plastic package, a rarity in auto-supplies field, is used for this Yankee Metal Products car mirror. Thermoformed acetate top lets customer see mirror without removal from customary carton.

Thermoformed blister on new Trojan Products Co. spark-plug package holds set of eight plugs in place on card. Folding carton with die-cut window then encloses it.





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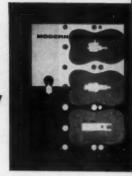
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Thermoformed blister on new Trojan Products Co. spark-plug package holds set of eight plugs in place on card. Folding carton with die-cut window then encloses it.









Bright-colored cartons for Sutone Corp. license-plate frames would not be unusual for many types of products, but in auto-supplies field, still crowded with drab boxes, they stand out.

aging is an absolute must. A number of the more alert manufacturers in the automotive field have begun to recognize this fact and a distinct trend toward more attractive, better labeled, protective packaging can be noted. Far too many manufacturers in the field, however, seem to be dragging their heels.

Says one retailer: "In our stores, we carry seven different brands of battery chargers. Every single one of them is packed in a plain brown box, with no color, no pictures, nothing but a part number for a label. As far as self selling is concerned, these packages are useless."

"Auto supplies" covers an extremely broad field of products—some essential, some useful but not exactly necessary, some purely "gadget" in nature. The field ranges from a tiny, five-cent rubber distributor nipple to a hundred-dollar car radio. It includes basic necessities such as tires, batteries and motor oil; replacement parts such as oil filters, thermostats and spark plugs; popular accessories such as mirrors, radio antennas and tail-pipe extensions; repair equipment such as jacks, wrenches and tire tools; liquid chemicals such as brake fluid, antifreeze and radiator cleaner; decorative and protective items such as seat covers, cushions and floor mats, and extra luxuries such as fancy ash trays, auto compasses and snack-bar trays.

Packaging requirements are as varied as the list of products.

Products stocked run the gamut in size, materials and durability. Some can be merely fastened to a card and piled on a counter; others need ingenious protection against all the hazards of the elements and human handling. In even the smallest auto-supplies section you will find metal cans of all types, set-up and folding cartons, glass jars, tubes, acrosols, squeeze bottles, rigid and flexible plastic packages and fibre tubes.

On the whole, there is little consistency in the packaging approach. Each manufacturer seems to feel his way separately in this fast-changing marketplace.

Take such a commonplace item as spark plugs: some manufacturers package them in conventional folding cartons, some in cellophane overwraps,



Slanted platforms, die cut to hold auto compasses made by Hull Mfg. Co., are topped with heavy transparent acetate lids which give an over-all view of products. Cartons, Paper Package Co.



**Grease in tubes** eliminates waste and mess in loading grease guns. These metal-end fibre containers are now used by a number of the larger manufacturers. Cartons, Selton Fibre Can Co.

#### Convenience for user grows in importance



Aerosol assortment holds complete array of "touch-up" enamel for convenient covering of nicks and scratches. Caps on tops of containers duplicate colors of the paint sprays they contain.

some in triangular acetate tubes, some in window cartons and some, very recently, in thermoformed plastic "blisters."

#### Basic packaging requirements

Like the packages themselves, the essentials in auto-supplies packaging range all over the map. Only a few general principles can be set down which might apply to the whole broad range of the field. But these would be sure to include:

▶ Very well planned descriptive labels. Many auto accessories and parts are semi-technical in nature, or come in a wide range of types and sizes to fit various makes of cars and their application must be carefully explained and described.

▶ Good display for impulse sales. A number of accessories manufacturers appear to have been slow to realize that their products are not always things on which car owners are pre-sold. A customer in a semi-self-service auto-supplies store is just as fair game for an impulse sale as a housewife in a supermarket. And this means good pictorial, visual display cartons.

Family design. Because of the wide range of the auto-supplies field, it often may be difficult to transfer the impact of a brand name from one item to the next. But a carefully planned family of related package designs can pay extra dividends. Sears, Roebuck—always a packaging leader—has been particularly successful in creating a huge family of packages for its line of "Allstate" auto supplies, all using the same color scheme and logotype. And Sears keeps design up to date; an extensive redesign



Hang-up carton used by the Electric Auto-Lite Co. dispenses the small folding cartons in which service parts for storage batteries are packed. Dispenser, S. H. Davis Paper Box Co.

program in this department is now in progress.

Although the auto-supplies industry, on the whole, has been laggard in the adoption of good packaging, there are many exceptions to this general rule. These are a few of them:

Yankee Metal Products Corp. Mirrors in allplastic packages with transparent formed-acetate covers.

Trojan Products Co. Set of eight spark plugs under a formed plastic "blister" enclosed in folding window carton.

Sutone Corp. Colorful [Continued on page 181]

#### Corned beef in foil

Another in the growing list of frozen main-dish foods that are packed to be heated and served with a minimum of preparation is Silver Skillet's sliced cooked corned beef. In this case, the meat is inside a foil pouch that can be popped into boiling water without being opened. After the half-pound supply of meat has been heated to the right temperature, the package is removed from the water, opened and the contents removed.

The aluminum foil pouch is slipped inside a solid sulphite carton and topped with a heat-sealed wrapper of laminated foil, which is rotogravure printed in six colors. Silver Skillet is introducing the new half-pound package of corned beef brisket first in the Chicago area. It is said to be priced at half that of corned beef sold in a delicatessen, yet offers greater convenience and simplicity for the consumer.

Credits: Foil pouches and overwraps by Milprint, Inc., 4200 N. Holton St., Milwaukee 11, Wis., using aluminum by Aluminum Co. of America, Alcoa Bldg., Pittsburgh 19, Pa.





#### **Dental floss on a spool**

Conventional cylindrical packages for dental floss often run into the problem of snarling when the coiled floss gets down to the last few yards. Johnson & Johnson's novel metal-and-plastic container, however, appears to eliminate this difficulty, since it uses a hollow spool to hold the floss and dispenses the product through a metal vent plate and cutter on one side near the top. The metal cutter both snips off the length desired and secures the free end of the unused portion.

The container itself is injection molded of polystyrene, with the revolving hollow spool fitting over a post molded into the interior wall. Five different sizes of the package have been introduced, including dental floss in 25-, 100- and 200-yd. lengths and Dentotape floss in 10- and 100-yd. lengths. The color schemes are reported to have been selected to give a feeling of a pharmaceutical and cosmetic product that would appeal to both men and women—white with pastel blue for the floss; white with navy blue for Dentotape.

Credits: Designs by Irvin J. Gershen, Maplewood, N. J. Polystyrene containers by Pyro Plastics Corp., Union, N. J.



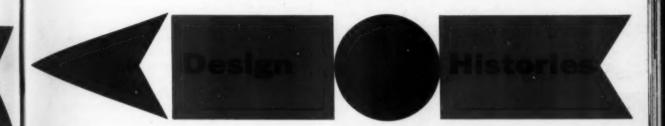
#### Dispenser for beer cans

Taking notice of the fact that beer cans often get lost inside a home refrigerator, Drewry's, Inc., has developed what it calls its "handy dispenser pak." It's a six-can carton which is designed to stand upright in a refrigerator and is constructed with a perforated strip which may be easily torn out, leaving an opening into which the cans drop automatically by gravity. From there, they may be easily removed as needed, thus keeping all the cans accessible at all times in one place.

Simple printed instructions on the carton explain the new "tear-out" feature and the carton's copy also includes recipes. The cartons are processed in four colors against a background of light blue, using a design which features a series of triangular shapes of different colors and highlights the manufacturer's traditional trademark symbol, the Drewry's shield design.

**Credit:** Cartons by Container Corp. of America, 38 S. Dearborn St., Chicago 3.





#### 'V' for vodka adapted to bottles and labels

With the rapidly growing popularity of vodka in this country, many distillers are jumping aboard the vodka bandwagon and introducing specially designed bottles for their new products. One of the latest is Continental Distilling Corp., which has begun national distribution for its Cavalier Vodka. Taking as its chief design motif the repeated letter "V" in both "vodka" and "Cavalier," the bottle itself is specially molded with V-like fluted ridges.

The bottle's contours are designed to take the exact shape of the label, which fits snugly into place. Bronzing and embossing on the label are used to create a highlighted grosgrain-ribbon effect.

The new Cavalier brand of vodka is offered in both 103and 80-proof versions, with a blue ribbon being used for the high proof and red for the low proof, in order that the two varieties may be quickly identified.

**Credits:** Designs by Clarence P. Hornung, 220 E. 46 St., New York 17. Bottles by Owens-Illinois Glass Co., Toledo 1, Ohio, Labels by Consolidated Lithographing Corp., Carle Place, N. Y.



# **Breaking up**

## the mixes

Meeting consumer demand for more convenience and more variety, baking-mix manufacturers are separating components in inner packages to give a heightened "do-it-yourself" appeal

Baking mixes, which have recently seen some of the fiercest competition for the consumer dollar, are still fighting it out. And packaging is one of the most powerful weapons in the battle.

With a handful of giant manufacturers locked in a struggle for her favor and with a host of smaller companies making their bids for attention, the housewife has found herself the beneficiary of unusually special treatment. She is getting new prod-

Polyethylene envelope separates burnt sugar flavoring from other ingredients in this new Duncan Hines mix, giving it the needed extra protection and letting user flavor to her own taste.



ucts almost without end. She is getting all sorts of deals and price-cutting campaigns. And, above all, she is getting convenience and *more* convenience, with a chance to get a variety of results out of one package.

One increasingly noticeable trend is toward what seems like a contretemps: greater package complexity. No longer are baking-mix manufacturers satisfied merely to mix together a batch of cake ingredients, fill them into a single protective paper pouch, slip them into a folding carton and send them to market. Although basic one-flavor mixes are still the meat-and-potatoes part of the business, recent months have seen a wave of entirely new kinds of products—each more specialized, more versatile, more complete than the last.

New baking mixes have been introduced which include their own separately packed portions of icing, of flavoring, of special ingredients. Mix packages are now on the market with their own built-in aluminum baking pans, pan liners, muffin cups.

Products now on her grocery-store shelf make it possible for the housewife to turn out things she would never have dreamed of making from a prepared mix only a few years ago—pizza pie, cinnamon bread, angel food cake.

Packaging—almost alone—has made this possible. Taking full advantage of the latest developments in packaging material, machinery and methods, baking-mix manufacturers have been able to put together many complex assemblies of containers at relatively high speeds.

The new mix packages combine such diverse elements as glassine, foil or laminated bags and pouches; heat-sealed envelopes of many different materials; metal or fibre cans; aluminum foil pans; parchment cups or pan liners. One mix now on the market, in fact, includes seven separate containers inside a single folding carton.

There are, of course, very good reasons behind this apparently growing trend toward more complicated packaging. Obviously, no one is going to



make his package more complex than need be—but sometimes there is no other choice.

And the new types of mix packages have produced some interesting results.

First of all, for the consumer, this now means that she may buy products that are:

- Easier to handle, since she may take advantage of built-in baking containers which are the correct size and do not need to be washed afterwards.
- Complete in themselves, do not involve buying extra special ingredients for fillings, icings and the like.
- Versatile, offering the chance to "mix and match"

elements in various ways to suit her fancy, or to change proportions of separate ingredients to get different flavors.

▶ Higher in quality, since segregating different portions of a baked product into separate containers usually yields a finished item that more closely resembles one custom mixed.

For the baking-mix manufacturer, there are also several reasons for packaging the various components in his product separately.

Most important among these is the opportunity to give each ingredient in the mix the best possible protection. Those which are most susceptible to

Very similar are heavily promoted all-in-one cakes introduced recently by two leading baking-mix companies. Each contains separate heat-sealed pouches of cake and frosting mix and an aluminum pan.





Pizza's popularity has prompted many "doit-yourself" kits. Chef Boy-Ar-Dee version, one of most complete, includes bag of flour, cans of cheese and sauce, sealed envelope of yeast.

moisture, or to the air, or to extremes of temperatures can be packaged in the specific materials which will best guard them. This actually can sometimes result in a cost saving for the manufacturer, since a relatively expensive packaging material need be used only for a particular component, rather than for the entire mix.

Combination packaging can also have definite merchandising advantages. It may offer a mix maker that vital "something new" which can be heavily promoted—especially important in a field where the major products, the plain cake mixes, are basically the same from one company to another. The largest-mix manufacturers, Pillsbury and General Mills, are each reported to have upwards of a hundred new products in the drawing-board stage, ready for final testing and the plunge into the test markets. And it's very likely that many of these involve ingenious new uses of packaging materials and machinery to again turn out baked products which have never before been available.

There are many examples of this new trend

toward "components packaging." The products which follow are typical—some have been introduced just recently and others some months ago.

#### Separating the flavor

Duncan Hines Burnt Sugar Cake Mix, by Nebraska Consolidated Mills Co., Omaha, Neb., contains:

 A glassine bag glued into a folding paperboard carton, in which are all conventional cake ingredients—sugar, flour, leavening, dry milk solids, etc.

(2) A separate heat-sealed polyethylene envelope of special burnt-sugar flavoring.

Since the flavoring is segregated out into a separate package, it may be used for both the cake and the frosting, it gets extra protection not needed by the other ingredients and the user can vary the amount she uses to suit her individual taste.

Even more unusual is this company's just-introduced Chiffon Cake Mix, which includes a separate packet of vegetable-oil shortening sealed in polyethylene-coated cellophane.

#### Most complicated of all

Appian Way Qwik Bread, by Food Specialties, Inc., Worcester, Mass., contains:

 Two heat-sealed pouches of active dry yeast, nitrogen packed in foil-acetate-Pliofilm laminate.

(2) Two kraft-glassine laminate bags for packaging bread mix.



(3) A kraft-foil-Pliofilm laminate heat-sealed pouch of garlic powder.

(4) A similar pouch containing cinnamon-sugar mix.

(5) An aluminum foil bread pan.

This diversity of elements permits the user to bake plain, garlic or cinnamon bread, with each ingredient getting the special protection it needs.

#### Heavily promoted pair

Betty Crocker Answer Cake, by General Mills, Inc., Minneapolis, Minn., and Kit Cake, by Pillsbury Mills, Inc., Minneapolis, Minn., both contain:

(1) A bleached kraft-foil-polyethylene heat-sealed pouch of cake mix. (For the Answer Cake, bleached kraft replaces glassine.)

(2) A similar, smaller pouch of frosting ingredients.

(3) A folded-end aluminum foil cake pan.

These two combination mixes, both of which have had heavy advertising by the two largest companies in the mix field, have consumer convenience as their big selling point. The two pouches are fitted inside the rectangular baking pan, which slips inside the outer folding carton.

#### Hopping the band wagon

Chef Boy-Ar-Dee Pizza Pie Mix, by American Home Foods, Inc., New York, contains:

(1) A sealed cellophane-foil-polyethylene pouch of active dry yeast.

(2) A glassine-polyethylene bag of pizza flour, folded and sealed at the ends.

(3) An 8-oz. metal can of pizza sauce.

(4) A 11/4-oz. can of grated cheese.

Although there are several similar products now on the market, this is the only one complete with cheese. With all of the ingredients in one package and only approximately 30 minutes of preparation time, this product has won favor with the "do-it-yourself" fad customers. The yeast, always the most delicate ingredient in baking mixes, gets the kidglove treatment here, with more conventional containers being used for the other elements.

#### Can and cups in a carton

Py-O-My Blueberry Muffin Mix, by Kitchen Art Foods, Inc., Chicago, contains:

(1) A polyethylene-coated glassine heat-sealed pouch of muffin mix.

(2) A 3½-oz. metal [Continued on page 189]

Credits: Duncan Hines Burnt Sugar Cake Mix: Pouches by The Cenpro Co., 1739 Harding Rd., Northfield, Ill., using polyethylene by The Dobeckmun Co., P. O. Box 6417, Cleveland 1, Ohio, and bag-making machinery by Bartelt Engineering Co., 1900 Harrison

Ave., Rockford, Ill. Appian Way Qwik Bread: Pouches for yeast by The Dobeckmun Co., P. O. Box 6417, Cleveland, Ohio. Bags for bread mix by Arkell & Smiths, Mill St., Canajoharie, N. Y. Pouches for garlic powder and cinnamon mix by Packet Products Co., Wilmington, Mass., using Cellothene film by Cheslam Corp., 284 Nepperhan Ave., Yonkers 2, N. Y. Aluminum foil pans by Ekco-Alcoa Containers, Inc., River Grove, Ill. Betty Crocker Answer Cake: Frosting pouches by The Dobeckmun Co., P. O. Box 6417, Cleveland, Ohio. Cake-mix pouches by Shellmar-Betner Div., Continental Can Co., Mount Vernon,



Twin cartons for Betty Crocker Angel Food Mix replace separate bags in a single carton. They are overwrapped to resemble single carton (rear).

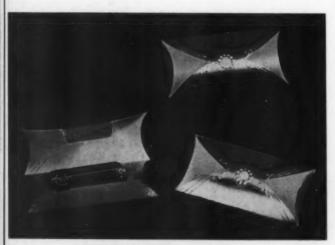
Ohio, and The Dobeckmun Co., P. O. Box 6417, Cleveland, Ohio. Aluminum foil pans by Reynolds Metals Co., 2500 S. Third St., Louisville 1, Ky. Pillsbury Kit Cake: Pouches by The Dobeckmun Co., P. O. Box 6417, Cleveland, Ohio, and Riegel Paper Corp., 260 Madison Ave., New York 16. Aluminum foil pans by Reynolds Metals Co., 2500 S. Third St., Louisville, Ky. Chef Boy-Ar-Dee Pizza Pie: Bags by Shellmar-Betner Div., Continental Can Co., Mt. Vernon, Ohio. Cans by Continental Can Co., 100 E. 42 St., New York 17, and American Can Co., 100 Park Ave., New York 17. Py-O-My Blueberry Muffin Mix: Pouches by Riegel Paper Corp., 260 Madison Ave., New York 16. Cans by American Can Co., 100 Park Ave., New York 16. Mussin cups by Harvey Paper Products Co., sub. KVP Co., Kulamazoo, Mich. Betty Crocker Angel Food Mix: Glassine carton liners by Riegel Paper Corp., 260 Madison Ave., New York 16; Rhinelander Paper Co., 515 W. Davenport St., Rhinelander, Wis.; Westfield River Paper Co., Inc., Station Rd., Russell, Mass., and Deerfield Glassine Co., Main St., Monroe Bridge, Mass.



Miniature concertina package is made of one piece of paperboard with folds that have actual bellows action. Carton holds a lipstick and a flacon of perfume.

### **Unusual carton constructions**

Pop-up, triangular and accordion designs dress up standard cosmetic items to make a clever, refreshing line for Avon's home demonstrators



Completely visible, lipstick is part of decorative element of this package. Die-cut flap holds lipstick in place when secured over curved ends.

Packagers who must be on a constant lookout for amusing and intriguing new ways to package standard items with gift appeal will find plenty of inspiration in the unusual decorative folding cartons now being used by Avon Products, Inc., New York.

This firm, eminent in the toiletries industry, is unusual from a merchandising standpoint in that all its business is done through house-to-house selling. Its packages, therefore, do not have the usual considerations of store, counter and window display.

Since they are seen by the prospective customer in critical, close-up examination, the packages depend heavily upon their design touches. They must be designed with just the right flair to catch and hold the customer's interest when a representative takes them out of the case, or perhaps shows elegant, full-color pictures. Packages are shown frequently in the mid-morning hours when Mother has gotten Father off to work and the kids off to school and is ready for a coffee break before starting her other tasks.

She's in the mood to look at something pretty.

The Avon packages show the many potentials for the folding carton when creative designers are given the chance to use their imagination and when foil coverings, metallic inks and sparkle dust are added to colorful printing.

The standout is a tiny carton in the form of a miniature concertina which holds two small lipsticks. The package is made of a single piece of thin bristol board, machine glued and printed in two colors and gold bronze. Inexpensive devices were made for setting up the carton and making the scores that give the realistic effect and actual bellows action. The printing completes the illusion, even to a printed keyboard at one end. A slotted strip of paperboard printed to look like a strap with a buckle holds the bellows in place.

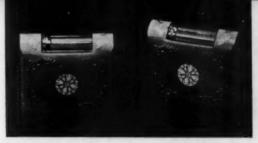
The pop-up technique has been applied to carton construction to house bottles and containers of Avon colognes and powders. These one-piece cartons are die cut and scored so that when a front flap is opened, one pop-up box reveals a carousel horse in third dimension, while another depicts a family scene around a three-dimensional Christmas tree.

A jewelled lipstick becomes a glamour gift item when put in an unusual-shaped, one-piece, foil-covered, embossed and colorfully printed paperboard carton constructed so that when closed it has a domed top and bottom. Cartons scored and folded by an ingenious triangular method become attractive Christmas-tree ornaments, each holding a single lipstick.

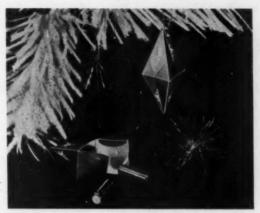
Other novel effects are achieved by unusual printing and die cutting of flaps to get away from conventional cube and rectangular contours. In one instance a side flap is die cut to hold and show a lipstick on the outside of the carton, making the lipstick a part of the package decoration.

The originality of construction and ingenious designs have commanded Avon's attention, for they give the added decorative appeal necessary to classify more or less standard cosmetic and toiletry items as "gifts" for holiday seasons.

Credit: Folding boxes created by the House of Harley, 15 E. 40 St., New York 16.



Unusual contours provide dome-shape top and bottom and curved ends of this aluminumfoil-covered, embossed carton to hold a lipstick.



Christmas-tree ornaments are ingeniously designed one-piece cartons to hold lipsticks. Intriguing shapes are the result of triangular scoring and die cutting of the flap blanks.





Third-dimension effect is achieved by special die cutting so that a front flap opens up to reveal a homey Christmas scene on one carton (left) and carousel horses on another (above).



















- M. K. Goetz Brewing Co.'s new Goetz beer has been introduced in this smart new family of bottles, cans and cartons. Colors are blue, white and cream. Design, Lippincott & Margulies, Inc., New York.
- 2 A 3-lb.-capacity high-pressure aerosol for Whitmire Research Laboratories' Air Sanitizer holds four times the volume of the average 12-oz. can, making a disposable dispenser practicable for hospitals and other institutional and industrial users. Containers, Tube Manifold Corp., Buffalo, N. Y. Valve, Precision Valve Co., Yonkers, N. Y.
- 3 Breakage has been cut 75% and sales have doubled with the introduction of this two-in-one potato chip package, So Good Potato Chip Co. reports. Two inner bags of bleached glassine are squared up in a chipboard frame, with an outer bag of super-

- calendered bleached kraft. Package, Shellmar-Betner Div., Continental Can Co., New York.
- 4 The trend to self service for hardware items prompted Chicago Metallic Mfg. Co. to pre-pack its broilers in colorfully printed polyethylene bags. Hole in top permits hanging bag from peg racks. Bags, Fleetwood Paper Co., Chicago.
- 5 A "remarkable" increase in sales resulted with the introduction of new aluminum foil bags for Gold Medal cookies, according to Southwest Cracker Co. Bags use 0.0035 foil glue mounted to 30-lb. sulphate paper, heat sealed on all sides. Bags, Milprint, Inc., Milwaukee, using Alcoa foil.
- 6 The realistic halftone printing on new wraps for Fruit Shortcake and Princess biscuits, made by the



















British firm of Macfarlane Lang & Co., Ltd., gives an almost three-dimensional effect. Material is a laminate of cellulose film with printing sandwiched between the layers. Wraps, Transparent Paper, Ltd., London, using Diolam film.

- Polyethylene bags for Varsity Pajama Co.'s line of Pullman Sleeper "Uppers and Lowers" are printed with a stylized Pullman car, with pajama tops and bottoms appearing in upper and lower berths. Bags, Lassiter Corp., Charlotte, N. C.
- 8 Tapered sides of the jar for William Barnes' "Home Brand" preserves tilt the label upward for easier reading on the display shelf. Glass, Armstrong Cork Co., Lancaster, Pa. Metal caps, Crown Cork & Seal Co., Baltimore, Md. Labels, Stecher-Traung Lithograph Corp., Rochester, N. Y.
- 9 Gravure-printed packets for T. J. Paisley Co.'s instant cheese-flavored Dip for Chips are made from a combination of paper, foil and polyethylene which effectively protects the dehydrated ingredients. Packages, The Dobeckmun Co., Cleveland, Ohio.
- A low-cost paperboard tomato tray that permits a bottom view of the product has been adopted by the New England Tomato Co. Multicolored streamers promote the new selling feature at point of sale. Tripl-Tite Bottom-Vue trays, Standard Folding Trays Corp., Jackson Heights, N. Y.
- 11 New 24-oz.-size glass containers now augment the smaller-capacity bottles of the Grapette Co.'s soft drinks. The private-mold designs and the applied color labeling duplicate those of the smaller-sized











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bottles. Glass, Owen-Illinois Glass Co., Toledo, Ohio.

- 12 American Steel Wool Mfg. Co. puts up six steel wool pads in this Handi-Kit window carton for the "do-it-yourself" market. Carton, Consolidated Paper Co., Monroe, Mich.
- 13 Eight marbles, put up in a polyethylene tube, fit neatly into this cellophane-overwrapped package of Crow Packing Co.'s Judge Roy Bean All Meat Franks. Promotion ties in with the company's TV show and the VFW national marble tournament. Wrap, Packaging Products, Inc., Kansas City, Mo. Backing board, Sutherland Paper Co., Kalamazoo, Mich. Meat casings, Tee-Pak, Inc., Chicago.
- 14 Frozen ravioli is protectively packaged by Gennuso Food Products in a carton of clear polyethylene

extruded on white patent-coated kraft board, eliminating the need for an overwrap. Carton, Howe Paper Div., Hubbs & Howe Co., Long Island City, N. Y., using board supplied by Tonawanda Boxboard Div., Robert Gair Co., Inc., New York.

- Plastic-coated glass aerosel bottles in a delicately curved shape are used by Shulton for its two new spray colognes, Escapade and Desert Flower. Bottles, T. C. Wheaton Co., Millville, N. J. Aerosol valves, Risdon Mfg. Co., Naugatuck, Conn.
- 16 Rigid containers of clear polystyrene in hollowstem goblet form create unusual packages for refrigerated strawberry topping and spread by Mid-West Fruit Flavors, Inc. Lids are either polyethylene or polystyrene. Wilpak Goblette container, Wilpet Tool & Mfg. Co., Kearny, N. J.



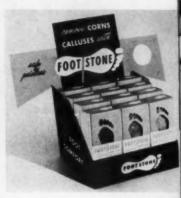












21







- 17 Packages for Jell-O's three new flavors are designed to be distinctively different from those for the regular Jell-O flavors. Strongly featured are "New" and the flavor name. Design, Robert G. Neubauer, Inc., Bridgeport, Conn. Cartons, Fibreboard Products, Inc., San Francisco.
- 18 Barbara Ann Baking Co.'s new "three dimensional" doughnut carton features a chain of doughnuts offset printed across the wide cellophane window. Its eye appeal reportedly increased sales considerably. Carton, California Container Corp., Div., Container Corp. of America, Los Angeles.
- 19 A comparison of the old and new labels for Old Forester Kentucky Straight Bourbon Whisky shows how subtle changes can create a more effective appearance without loss of any former identity.

- Major changes are addition of a "bottled in bond" seal and a bottle serial number. Design, Raymond Loewy Associates, New York. Label, Lord Baltimore Press., Inc., Baltimore.
- 20 By simply tearing out a bottom flap along dotted lines, the new shipping case for Arvon Products Co.'s crack-filler compound becomes a self-service dispenser. Two cans appear in the dispensing slot, separated by a center divider. Case, Eastern Div., Stone Container Corp., Philadelphia.
- 21 Individual cartons for U.S. Pumice Supply Co.'s Foot-Stone are die cut in the shape of a foot, allowing the lava stone to show through. Counter unit is attention getting with a similar foot-shaped design across the riser and front panel. Cartons and display, Flintkote Co., Los Angeles.



Animation comes to Pablum cereals with addition of smiling baby's face to each of four varieties, with different background color for each, in striking contrast to the old plain carton. New cartons are taller and thinner.

### **Tailored to the shelf**

By a simple change of dimensions, Mead Johnson now gets 24 of its bright, new Pablum cartons in the same shelf area that formerly held only 20

ore than ever, shelf space in the grocery store is the limiting factor. With hundreds of new food and non-food products competing for every single inch of space, even the most solidly entrenched products must keep constantly on the alert.

Pablum Products Div. of Mead Johnson & Co., which has its pre-cooked baby cereals on virtually every grocery shelf, has decided not to stand still with a familiar, established carton. Instead, it is introducing four bright new packages whose dimensions have been carefully engineered to get better value for dealers out of the space they occupy.

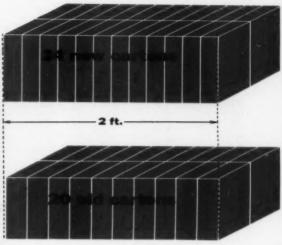
Without any change in the capacity, Pablum has developed a carton which takes up 20% less shelf depth. This means that a full case-load of 24 cartons of Pablum can be displayed in the same space into which only 20 cartons could formerly be set up.

The secret of this apparently magical feat lies in

Pablum's careful study of shelf-stocking practices in stores. When the old package was placed on end on a shelf, a sizeable amount of dead space was left above it. If the carton were made taller, this wasted area could be utilized. So Pablum 8-oz. cartons were increased in height from 6¾ to 7¾ in. With this dimension increased, of course, it was possible to decrease the thickness of the carton and still keep the same total volume. Accordingly, the new Pablum package is only 2 in. thick, a saving of about ¾ in.

Placed face-to-back, a dozen of these new 2-in. packages can be lined up in the depth of a conventional 2-ft. shelf and two rows will hold a carton of 24. Before, the store could only squeeze 10 of the old, thicker cartons into a row on the same size of shelf, with two "fronts" using up only 20 packages. This meant that there were four left-over cartons in each case, which had either to be used to start a third





More height and less bulk enable new cartons, containing same 8 oz., to stand 12 deep on a 2-ft. shelf, instead of 10 deep as formerly. Thus an entire 24-case carton can now be stacked in two rows of shelf space.

row or crammed in endwise on top of the neatly lined-up packages.

A change in measurements is not the only improvement for the redesigned Pablum cartons. Colors have been brightened and a pictorial representation of a smiling baby's face added. The full-color face is the same on each of the four varieties of Pablum, along with the familiar red oval in which the Pablum logotype appears in white. Colors for the four varieties have been chosen to contrast pleasantly with each other. Mixed Cereal comes in an orange package; Rice Cereal is light blue; Oatmeal, yellow, and Barley Cereal, light green. Copy on all four cartons is in dark blue and red.

Two other features have been incorporated to make things easier for the store clerk. A tear-tape embedded in the shipping-case wall makes it a simple matter to split the case in two without the use of a cutting tool. And, to speed up price marking, special white spots now appear on both the top and bottom of each carton.

Credits: Cartons by Alton Boxmakers, Inc., 812 Olive St., St. Louis 1, Mo.; Chicago Carton Co., 4200 S. Crawford Ave., Chicago 32; Consolidated Paper Co., Monroe, Mich.; The Robert Gair Co., Inc., 155 E. 44 St., New York 17, and The Gardner Board & Carton Co., Middletown, Ohio. Wrappers by Keller-Crescent Co., 28 S. E Riverside Dr., Evansville, Ind.



Price spots are now provided on both top and bottom of carton, for greater convenience of clerks. Note trademark, face and cereal variety also appear on both ends, for shelf identity no matter how cartons are stacked on the shelf.

## OWENS-ILLINOIS ASSURES YOU A



Co-ordinated Research

Pure research into formulae and fabrication of glass, packaging research into processing and handling methods in customer plants, and market research into consumer attitudes, add up to greater specific value for your packaging dollar.



**Engineered Design** 

The package that takes your product to market must take *three* needs into account. Considerations of its function in the retail store, its operating efficiency and its consumer utility all become a part of the prescription for an Owens-Illinois package.



The Right Container

Versatility of facilities enables Owens-Illinois to supply containers to meet special needs: Duraglas containers for almost any item; Libbey Safedge packing tumblers or premiums; Kimble Ampuls and Vials; and a variety of Owens-Illinois plastic containers.

# The right closure sells





## COMPLETE PACKAGING APPROACH



The Right Closure

Know-how as to the best available liner and closure—best for packing, displaying, or using a specific product—may well be one of the most important single points through which expert packaging counsel will reward

you many times over.

meet ers for

pack-

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**Needed Fitments** 

With emphasis on the word "needed," Owens-Illinois specialists are keenly aware of sales benefits possible through use of plastic shaker and pour-out fitments which are not "gadgets" but which increase consumer satisfaction with your product.



**Merchandising Cartons** 

Modern cartons are developed only through systematic consideration of their opportunity to serve you in the retail store and retail warehouse as well as on your own filling line and in transit. Owens-Illinois is pioneering such developments.

# while it protects...



# These Metal and Molded closures both pass the test

Building more sell into your package often starts right at the top.

Could your product benefit from a Tacseal tamperproof inner seal? Could you benefit from a stacker cap and jar for easier display in the retail store? Could your cap carry a stronger point-of-sale message?

Would a smart molded closure improve the eye appeal as well as the utility?

At Owens-Illinois, all the necessary ingredients of salespackaging are co-ordinated to secure the extra sales

impact you need. Look to Owens-Illinois as a market-minded supplier for glass containers of all types and capacities, cartons with built-in point-of-sale value, fitments that meet your dispensing need, quality closures in metal and plastic.

METAL AND PLASTIC CLOSURES
AN (1) PRODUCT

OWENS-ILLINOIS

GENERAL OFFICES · TOLEDO 1, OHIO

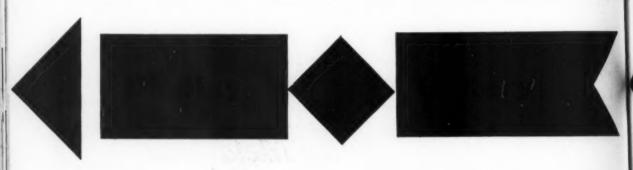
#### **Full-height Heidt**

A life-size, lithographed, full-color reproduction of band leader Horace Heidt is being used by Swift & Co. to stop supermarket customers in their tracks.

This floor display stand is designed to serve a double purpose: promoting his television program, "Swift's Show Wagon," and calling attention to all the Swift products on sale in the store. The first task is done by means of a big card which Heidt holds in his hand, while product promotion is accomplished via an umbrella of simulated musical notes over the band leader's head. Each of the eight notes bears a color illustration of a different Swift food: lamb, baby meats, butter, chicken, processed cheese, margarine, canned meat and tongue. These "notes" are fastened to a pair of wires which jiggle up and down easily. The reproduction of Horace Heidt is attached to a hollow pole, through which the wires continue down to the floor, where they form a four-pronged base for the display.

Credit: Display by Einson-Freeman Co., Inc., Starr & Borden Aves., Long Island City 1, N. Y.





#### Cosmetics in the garden

A grassy lawn covered with cosmetic packages is now being planted by Prince Matchabelli, Inc., on department-store counters. For its Summer Shower line of warm-weather grooming aids, the company has designed a display piece whose base is an oval plot of grass. On this, there is room for a sampling of packages from the line: matching glass bottles of bath salts, perfumed sachet and two sizes of cologne—all square in outline with plastic caps; a square glass atomizer; a square polyethylene squeeze bottle of deodorant, and set-up boxes of soap and dusting powder. Color scheme for all the packages and labels is dark green and aqua, with a "raindrop-in-a-pool" motif being featured.

At the rear of the display piece, paperboard cut-outs simulate a watering can against a white garden fence, both being entwined with artificial green leaves. Copy tells customers to "take the sizzle out of summer" and lists prices. The "grass" on the base of the display, incidentally, is not artificial—Matchabelli says that it is actually real grass that has been dyed and coated with preservative.



#### All-around dispensing

An ingeniously constructed dispensing display developed for Eversharp, Inc., uses just two pieces of transparent plastic to form channels to hold merchandise on all four sides. In this way, the packages on display can be seen from any angle, with no parts being hidden behind opaque brackets or holders.

The two pieces, both identical, are extruded from cellulose acetate 1/16 in. thick and roughly resemble a letter "H" in cross-section. Each has two positioning beads on its center rib and top flanges that are folded over to keep packages in place. These two pieces are fastened to the center wood block with screws and the entire display revolves upon a wooden base. On each of the long sides there is space for displaying three Eversharp razor kits, while the end compartments each provide room for a dozen packages of blades.

**Credits:** Display by Merit Displays Co., Paterson, N. J. Brackets by Anchor Plastics Co., 36-36 36 St., Long Island City 6, N. Y., using Eastman Chemical Products' Tenite acetate.









#### For home-team fans

Newest window display for Carstairs Div., Calvert Distilling Co., is pinpointed to appeal to baseball fans in three important company selling areas.

Simulating a baseball park, the full-color lithographed, dimensional set-up features four actual bottles of Carstairs whiskey fitted into die-cut openings on the diamond. In the background, packed double-decker stands topped by banks of lights, add to the baseball flavor.

Topping the display is a large rectangle bearing the familiar "Yes, Carstairs" slogan, preceded by a line reading "The man who knows the score says..." Most novel feature of the point-of-purchase piece, however, is a smaller rectangle set beneath this. Here, a variation of the slogan reads, "Yes, Red Sox"—or "Giants," "Yankees," "Dodgers," "Orioles," as the case may be. In this way the retailer in Boston, New York or Baltimore can insert the most appropriate team

Credit: Display by Consolidated Lithographing Corp., Carle Place, N. Y.



## How to manage a family

Continuing successful redesign program of United Gilsonite throws much light on the perennial problem of maintaining unified identity while differentiating the specialties

Rearly every firm that puts out a large line of products sooner or later is faced with the basic questions that always arise in relation to package design:

How far should we go in establishing family resemblance?

What shall we do about our old trademark?

How can we have family identity, yet differentiate specific products?

How do we make packages stand out from the competition?

There are as many answers to these age-old questions as there are designers to solve them. And there are as many ways to achieve the desired result.

Each new solution is interesting and often helpful to others in the same boat.

A useful current example is the experience of the United Gilsonite Laboratories, Scranton, Pa., in its continuing package-design program, embracing 41 different products—paints, sealing compounds and a variety of others in the home-improvement classi-



To sell the line is the aim of this unified new group of packages for paints and home-improvement items. It all started with a new package for one product whose sales had been slipping, but were resumed to their former level immediately on bringing out new package.

fication—which are packaged in numerous types and sizes of containers totaling more than 150.

The products are promoted primarily by direct mail to dealers on the basis of a reputation for reliable products and sound development of new and improved products. On this basis the company has enjoyed substantial growth over a period of 25 years.

Actually, there was no intention a short time ago to redesign the entire line of U-G-L packages. The whole program started when sales of one product started dropping for unknown reasons. A market check showed that greatest competition was coming from a product of another manufacturer in a more colorful package.

An independent package designer was called in, a new package was designed and produced, and sales of this product almost immediately resumed their former level.

This instance threw the spotlight on all the company's packaging. If a new package could do so much for one product, what could it do for others? The designer was put to work on several others, with the same satisfactory results in sales.

This was convincing evidence to management that a program should be put into effect to cover the whole line.

#### Objectives

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- Meet competition with packages that can hold their own in all competitive situations.
- 2. Sell the line with more emphasis on U-G-L identity for quick recognition.
- 3. Eliminate chances of confusion by means of design differences without impairing a desirable family relationship among all products.
  - 4. Get the story across for self-service selling.
- 5. Strengthen consumer confidence with a strong identifying trademark.

The old packages were "picked to pieces." The



Stepped-up identity is sharply illustrated by a comparison of the old and the new package. Old heraldic trademark device was scrapped. In its place is the U-G-L device in upper left-hand panel appearing in red on a white background, like a magazine masthead. Package background is blue.



To distinguish aluminum paint for hot surfaces, color scheme is reversed with red as background color to suggest product use, without destroying family resemblance.



Specialties need special treatment to relieve monotony of standard design. Product name and sell copy quickly convey the product's purpose. all-blue color of the packages had acquired almost the value of a trademark, but a single-color blue package, it was obvious, could no longer hold its own against competitive two-, three- and multi-color packages. A lack of resemblance among the various U-G-L products prevented pushing the products as a line, yet it was realized that there would have to be strong product differentiation to keep the packages from blending into a single mass on the shelf and for distinguishing the packages in the company's catalog.

Two different trademarks—the U-G-L initials and

a monogram of the same in a shield—did not establish recognition in the minds of the trade. Selling copy forced into squared-off shapes was tidy, but resulted in monotonous blocks of uninviting words to read with no sensible emphasis on the proper points.

The first step in the over-all redesign program was the decision to retain the familiar blue color of the former packages for brand continuity. Added to it, however, is a second color, red, skillfully used with the white background as the third color. The red, white and blue not only express quality, the company feels, but have turned out to provide just the color scheme needed against competition. Most paint firms use a riot of colors on their labels, so that the U-G-L labels stand out strongly by contrast.

The heraldic shield device was scrapped and the U-G-L letters retained, but strengthened as the identifiable trademark. This basic recognition device, though with variations, is comprised of the U-G-L letters in bright red on a white field, with the trade name and product description in reverse white on a blue background. More importance is given to the three-letter trademark by placing it in an off-center, upper-left-hand panel, similar to a magazine masthead, and always keeping it in that position. Red is used elsewhere, but sparingly; it is reserved mostly for bold trademark use.

The desirability of emphasizing specialty products dictated a departure from the standard, thereby avoiding the monotony of over-all sameness.

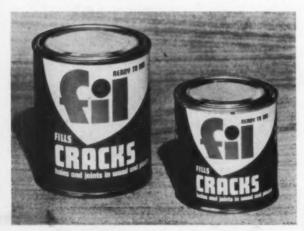
For example, U-G-L Aluminum Paint, made especially for hot surfaces, is distinguished by a label predominantly red to convey the "hot surface" idea. However, the reversal of color scheme still maintains the family recognition.

Even greater variations of design were found necessary for new products in the line. An example is the package for "Fil," a ready-to-use, all-purpose crack filler. The name [Continued on page 181]

Credits: Redesign program by Frank Condon Associates, Inc., Northport, N. Y. Folding boxes by Towanda Folding Box Co., Towanda, Pa. Corrugated boxes by Stone Container Corp., 4200 W. 42 Pl., Chicago 32. Metal cans (paint, etc.) by Continental Can Co., 100 E. 42 St., New York 17. Metal pails (cement, paint, etc.) By Crown Cork & Seal Co., Inc., Can Div., Erie Ave. at H St., Philadelphia. Lithographed cans (Ejecto) by Continental Can Co. Glass jars (aluminum paint, etc.) by Hazel-Atlas Glass Co., 15 & Jacob Sts., Wheeling, W. Va. Collapsible tubes (caulking) by Aluminum Co. of America, Alcoa Bldg., Pittsburgh 19, Pa. Fibre tubes (cartridges for caulking) by Penland Paper & Converting Co., Hanover, Pa. Paper bags (Drylok, etc.) by Bemis Bro. Bag Co., 111-H N. Fourth St., St. Louis 2, Mo. Labels (paint, etc.) by Keystone Printed Specialties, 321 Pear St., Scranton, Pa.



Related design treatment, even without trademark letters, keeps package for "Mex" in U-G-L group. Self-sealing punch was given by paring down sales message to barest essentials.



New product gives full play to appropriate name. Because of its sales potentials, the company decided to let the product name dominate label, but even here the similarity of coloring and handling maintains a kinship to the line,

another
prestige
product
packaged
by
BURT

or since Bath Powder the world for RK in



MARINE BATH POWDER

F. N. Burt Company, Inc.

Manufacturers of Small Set-up Boxes,
Folding Cartons and Transparent Containers

500-540 Season Street, Buffalo 4, N. Y.
Offices in Principal Cities Of Write Direct
Canadian Bly. Dominion Paper Box Co. Ltd.,



Fore and aft, the new Useco package for tiny electronic parts does a better job of merchandising. Board-weight, heat-sealed header label, elongated in the back, not only gives better visibility to contents, but also provides desirable rigidity and protection to the cellophane envelope. And back of the board is used to promote other Useco products.

## **Backdrop for cellophane**

Better visibility for small parts
is provided by continuing heat-sealed header board
down the back side of cellophane bag

he smaller they are, the harder they are to package. At least, this is what the U. S. Engineering Co., Los Angeles, found when it began developing a retail package for small quantities of "terminal lugs," which are used by electronic and aircraft manufacturers and electronic engineers.

A primary objective in the company's packaging development program was to achieve maximum visibility, because of the extremely small size of the lugs.

Specialists in packaging design and lithography were called in to assist in the program. Through experimentation, the company found that the lugs became virtually lost in conventional cellophane bags; lost, that is, without some background against which they could be displayed.

Package designers evolved a simple, but effective solution: extend the back side of the heavy, boardweight bag top down the back of the cellophane bag to the bottom, thus forming an eye-catching backdrop for the small products. The bag is heat sealed to the header under the fold and at the bottom of the extended back.

The new package, in addition to serving as an effective merchandising piece, also acts as a protection against corrosion, encountered in bulk packaging, and simplifies handling for the retailer, according to Useco.

The heavy, card-weight stock of the specially designed bag top is lithographed in vivid orange and yellow, with maximum brand-name emphasis. The reverse side of the package is used to promote other Useco products, such as knobs and handles for radio sets and electronic apparatus.

Credit: Package by H. S. Crocker Co., Inc., 100 San Mateo Ave., San Bruno, Calif.



The copper-colored polyethylene "Skol" squeeze spray bottle has label and directions pressed into the surface by the hot stamp method, giving sharp, clean lettering that won't wear off. Flask shape makes squeezing easy, producing strong, fine spray. Bottle is re-fillable. Lotion can be poured as well as sprayed. Data courtesy Plax Corporation, Hartford, Conn.

# How 4 different types of packaging made of BAKELITE Brand Plastics can help you

# Score a hit with users

Make your product more impulsively appealing at the point of sale...more conveniently practical at the point of use... and you'll score a record number of points in the business of *keeping* customers. And bear in mind how many more chances you have of doing just that with spray bottles, squeeze bottles, tubes, jars and cans molded of BAKELITE Brand Polyethylene. Color and convenience certainly make a big hit.

## Score a hit with users

continued from preceding page



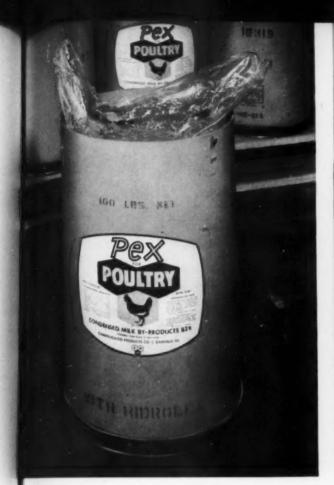
#### Polyethylene lining for packet chosen for "better sealing characteristics"

Keeping moisture away from "G. Washington's" Broth and Seasoning powder was the problem solved by American Home Foods, Inc., New York, N. Y. They scored a big success by lining their foil packet with polyethylene. According to Dr. Richard Reinecke, vice-president: "This powder 'dusts' more than most. On most other surfaces, this would make the seal ineffective in many cases; dusting makes no difference in the effectiveness of the polyethylene seal."

Keeping up to date on the many benefits of packages made with BAKELITE Brand Polyethylene can help you build business by helping others to solve problems. For a copy of our "Processed Foods" packaging booklet, write Dept. RK-105.



Tight sealing keeps moisture from caking or affecting the flavor of the broth and seasoning powders. The packets, lined with polyethylene, supplied by Shellmar-Betner Flexible Packaging Division of Continental Can Co., Mt. Vernon, Ohio.





"With polyethylene liners, we employ a lightweight fiber container which, because of the liner, is positively sealed against the high moisture content of the feed. At the same time, the liner blocks atmospheric moisture from entering and causing a 'brick' effect upon our product."

"It isn't difficult to see why, with all the other advantages, we are shifting to the polyethylene-lined corrugated box. This costs only ½ as much as the can formerly used."

#### Container weight slashed by 90%

And that made a big hit with Consolidated Products Company, Danville, Ill., subsidiary of National Dairy Products Corporation, manufacturers of milk by-product animal feeds. They did it by using film made of BAKELITE Brand Polyethylene as liners in drums and boxes throughout their line of liquid, solid and semi-solid products.

"The application of this moisture-resistant material has permitted a conveyor-line technique, reduced labor, slashed container weight by 90%, rewarded us with a positive moisture barrier, eliminated mould, made a more attractive package, improved packaging, and has enabled us to market new products impossible by other marketing methods."

Ask your packaging supplier about



(continued on next page)

## Score a hit with users

(continued from preceding page)

When you need film that's not only strong, but exceptionally clear as well

Krene Cast Vinyl Film is just the material. Strength is truly unique... for a film so sparklingly clear.

It's highly resistant to corrosives ...takes an excellent heat seal...has high moisture and vapor resistance ...and keeps flexibility and strength with optimum resistance to cracking and drying out.

It makes dramatically brilliant packaging for a host of products. Why not find out more about Krene Cast Vinyl Film...and all the other types of better packaging made of Bakelite Brand Plastics. For a copy of "1956 Guide to Packaging," write Dept. NY-105.



First in the world of plastics...



BAKELITE COMPANY, A Division of Union Carbide and Carbon Corporation TIE 30 East 42nd Street, New York 17, N. Y.

The terms Bakelite, Krene, and the Trefoil Symbol are registered trade-marks of UCC

## A nest for the Falcon

A clew to packaging requirements in the guided-missile age
may be found in these shipping containers
developed by Hughes Aircraft for top-secret air-to-air weapon



The Falcon, an almost-human air-to-air guided missile being built for the Air Force by the Hughes Aircraft Co., is the smallest and most compact of this family of deadly new weapons of war. In contrast to the giant missiles designed for intercontinental attack, the Falcon is an electronically guided airborne weapon for use by interceptor planes to destroy enemy bombers.

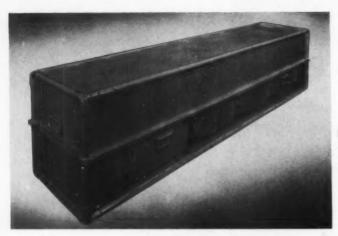
Although it is relatively small in size—about 6 ft. long, 6 in. in diameter and weighing less than an average man—it is extremely compact in design. Employing radar and electronic controls to follow relentessly and kill an attacking bomber, the Falcon utilizes thousands of components that are reduced to a size comparable to what would result if two television sets were compressed into a space the size of a football.

The delicacy of this minute electronic equipment

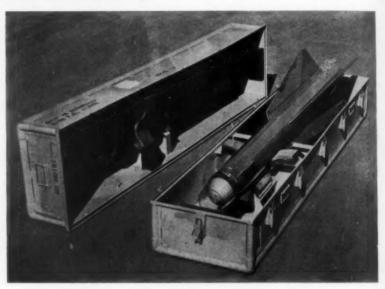
presented Hughes with a tremendous packaging problem. This is the first time that the packaging story of this vital new weapon, on which our future security might depend, has been told.

The Air Force had rigid specifications. The Falcon was a top-security item that could be shipped only by specified carriers.

Although the missile is built to withstand a tremendous thrust at its moment of launching—a force so great that no human could live in such an environment—it is not designed to stand up under loads imposed if it is dropped sideways. Thus the container had to offer special protection against this kind of shock. Also, one container was needed for land and overseas shipment and storage, and an entirely different one for shipping the missile by air. Also, definite maximum and minimum temperature limitations were imposed. And finally, the entire



For immediate use, missiles are packed in the lighter DSC-3 squadron storage case, seen here closed (left) and open (below). Container is made of aluminum and secured with 12 suitcase-type catches. Transparent plastic hood protects nose of missile.



missile had to be shipped complete in a single package. To meet all these strict requirements, Hughes engineers designed two packages, the DSC-2, known as the "all-purpose shipping container" and the DSC-3, or "squadron storage case."

#### The DSC-2

In addition to serving as a shipping container, the all-purpose DSC-2 is intended for use as a storage container for as long as two years. It is designed to protect the missile it contains against the shock resulting from a drop of as much as 36 in. And it is watertight, so that, if necessary, the container can be dropped overboard and floated ashore.

The DSC-2 is a heavy steel case somewhat resembling a giant clam shell. Its top and bottom halves are joined together by hinged bolts on all four sides, with the junction slightly below the center line, in order to make loading and unloading easier.

Inside this metal shell is a 2-in. blanket of fibre glass, pre-formed to fit its contours and coated with synthetic rubber to prevent dusting. This provides insulation and protection against physical damage from light impacts.

For shipment, the missile itself is broken down into four parts: forward section, aft section, fuse and booster, and igniter. The two main sections are nested above each other and supported by an aluminum yoke assembly, which holds them firmly in position. The lower section of the yoke is hinged to permit lowering the aft portion of the Falcon directly down into a nest, after which the yoke is secured with two bolt fasteners. The upper yoke section is also hinged, to permit lowering the forward portion of the missile directly on top of the aft section, and is secured with a pair of bolt fasteners.

The fuse and booster are enclosed in a can and mounted to a plate which is locked to the after end

of the forward missile assembly, and the igniter, also in a can, is secured in a special clamp attached to the missile.

With the four parts of the Falcon locked in place, the container is closed by tightening the nuts on 38 hinged bolts. A seal is effected by means of an O-ring in a channel adjacent to the bolting area, bolting action establishing metal-to-metal contact.

Inside the closed container, humidity is controlled by means of bagged silica gel desiccant, which is placed in a basket just in back of a desiccant access port, through which it may be replaced or replenished as required. A humidity indicator in a special holder is secured to the side of a view port.

Other accessories are a dial thermometer, which is locked on maximum and minimum temperature limits to indicate whenever these limits are exceeded; inlet and pop-off valves to maintain constant pressure; and a 3-by-14-in. cylindrical record container, opening onto the outside.

The fully loaded container is 34½ in. wide, 62 in. long, 37½ in. high, and weighs 490 lbs. It may be handled by a crane connected through lifting eyes in the top of the rolling rings; by fork lift, either sidewise or lengthwise; or manually by six men lifting with hand grips. Either loaded or unloaded, the containers are strong enough to be stacked up to four high.

After each use the containers are normally put through a maintenance schedule, which usually involves cleaning, repainting, replacing O-rings and replacing the wood skids on which the DSC-2 rests.

#### The DSC-3

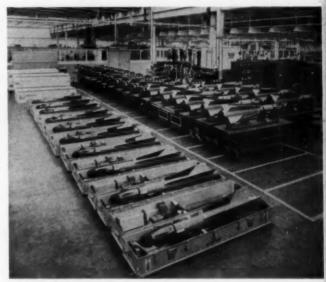
Although the DSC-2 container has proved to be an excellent heavy-duty storage and shipping case which will protect the Falcon perfectly for as long as two years, another container was also necessary. For missiles that are to be kept available for immediate duty, a case that took less time to open and would not require breaking the Falcon down into four components was wanted. Also, for shipment by air, the container had to be lighter in weight and have better stacking qualities.

To meet these special requirements, the DSC-3 was developed. Although this does not provide the degree of protection against water-vapor transmission and climatic conditions found in the DSC-2, it is much lighter and easier to handle.

The DSC-3 is a long rectangular metal box which opens along its longitudinal center line and is fastened with 12 heavy-duty "suitcase" catches. With these, two men can open the case, remove the missile, install it in a plane in a matter of minutes.

A rubber gasket provides sealing to protect against the entrance of solid water such as rain. Inside the metal case, the assembled Falcon is mounted on a series of brackets, covered with thick foam-rubber cushions, which protect against a shock equivalent to a 12-in. drop onto concrete.

Credits: DSC-2 containers by The Champion Co., Springfield, Ohio, using shock mounts by Lord Mfg. Co., Erie, Pa.; "Fiberglas" by Owens-Corning Fiberglas Corp., 16 E. 56 St., New York 22, and "Neoprene" rubber by E. I du Pont de Nemours & Co., Inc., Wilmington, Del. DSC-3 containers by Craig Systems, Inc., Danvers, Mass., and The Vendo Corp., 7400 E. 12 St., Kansas City, Mo. Special dunnage material by American Latex Products Corp., Hawthorne, Calif.



In quantity production, Falcon guided missiles being turned out at Hughes Aircraft Co.'s Tucson, Ariz., plant, are loaded into light-duty DSC-3 containers, which are used for air shipment.



Nozzle plug fits securely into rear of rocket motor of the Falcon, sealing the motor against foreign particles during shipment and storage.



Latest achievement in

# controlled packaging



An excitingly new member has been added to the "FLUID" family of "contract packaging" — polyethylene plastic tubes and bottles by Bradley Container Corporation.

These versatile containers include most of the advantages of glass and metal packages. In addition, they are lightweight, unbreakable, chemically inert, and are easy-to-use squeeze type dispensers.

FLUID'S modern versatile equipment now includes the latest in automatic machinery for filling and sealing of these Bradley containers.

Let FLUID'S controlled packaging methods satisfy your requirements—whether they are for liquid filling, aerosol loading, or these latest plastic tube applications.

"First in Contract Packaging"

883 MT. PROSPECT AVE. NEWARK, N. J.

CHEMICAL COMPANY



LIQUID-TUBE--DRY PACK FILLING RESEARCH DEVELOPMENT

FOUNDED 1921

## Use of antioxidant in paperboard

A report on mill methods of adding Ionol CP antioxidant to stock and the results in retarding rancidity in food cartons

By M. E. Doyle\*, R. D. Sullivan\* and H. G. Booth

he addition of an antioxidant to the paperboard used for food cartons has been the subject of an ever-increasing study during the past few years. When foods containing fats or oils are packaged in paperboard containers, a certain migration of the fatty material into the paper occurs. Because of the greatly increased surface area exposed under such conditions, the fat rancidifies rapidly, giving rise to offensive odors. Under such conditions the food products are still sweet; however, the stale or rancid odor emanating from the package lead to customer rejection. Physical modifications of the package offered a partial solution, but such modifications are costly and not entirely satisfactory. The most promising approach developed to date resulted from investigations which showed that incorporation of an antioxidant into the paperboard food cartons protected the migrated fat from oxidation.

Many materials have been suggested for use in antioxidation-containing carton stock. Carlin (1)1 proposed pyrogallol, citric acid and galacetonin; Musher (2) used hydroquinone and Bentz (3) employed butylated hydroxy anisole. In all cases there was some improvement in the shelf life of the package. More recently, Ionol<sup>2</sup> CP, a specially purified grade of 2,6-di-tertiary-butyl-4-methyl phenol, received the approval of the Food and Drug Administration as an antioxidant for foodstuffs. Subsequent examination (4) of Ionol CP in carton stock has shown it to be particularly effective in preventing the appearance of rancid odors (5). This paper discusses the factors involved in the addition of Ionol CP antioxidant to paperboard during the papermaking process and describes shelf-storage tests carried out both on laboratory hand sheets and on board treated in commercial mill runs.

#### Addition to paperboard

The problems involved in the addition of modifying chemicals, resins or fillers to paper are essentially those of selecting the proper stage during the paper-making process at which addition can be made with the maximum retention and minimum change

It has now been established that the shelf life of food products packaged in paperboard can be markedly improved by incorporation of an antioxidant in the paperboard. (See Modern Packaging, Jan., 1956, p. 118.) The antioxidant inhibits the development of rancid odors in the fat which migrates from the food products into the wrapping. In the work reported on here, various methods of adding the antioxidant to the paperboard during manufacture have been investigated. The effectiveness of the antioxidant in retarding rancidity has been shown on both laboratory- and mill-impregnated paperboard.

<sup>\*</sup>Of the Shell Development Co., Emeryville, Calif. †Of the Robert Gair Co., Uncaaville, Conn. \*Numbers in parentheses identify References appended. \*Registered trademark, U. S. Patent Office.



Fig. 1. Organoleptic evaluation of food-board samples which have been treated with lard and stored in closed vessels at various temperatures. Perception of incipient rancidity in standard carton stock comes after 144 hrs. at 100 deg. F.; in stock impregnated with 0.5% Ionol CP antioxidant it takes 3,360 hrs.

in operating procedure or equipment. Addition at the wet end of the machine, either in the beater or stuff chest, has the advantage of simplicity, but suffers in that retention of the additive is generally poorer here than at subsequent stages. This generalization is true for beater addition of Ionol CP.

Typical retention values, obtained on hand sheets wherein the Ionol CP was added to the pulp slurry, are shown in Table I. In this comparison a cationic active emulsion of a specially synthesized radioactive Ionol CP (containing  $C_{14}$ ) was added to the pulp slurry (see Emulsion 1, Table V). The treated slurry was allowed to stand for 1 hr. to set the antioxidant, after which the hand sheets were formed on a sheet mold according to Tappi standards. Retention of the antioxidant at various stages of the sheet formation was followed on the basis of the radioactive content of the sheet.

As shown, retention in the sheet-forming stage was somewhat less than 50% of the amount added to the slurry. Such losses are, however, not unexpected with beater addition in hand-sheet formation and could logically be expected to be considerably lower in machine production with a closed white water system.

The failure of the fibres completely to entrap an additive is not surprising and is encountered when clays or other inert fillers are added in the beater; there is, however, an additional phenomenon to be considered when phenolic antioxidants are employed, namely, the loss during the drying stage. Antioxidants of the phenolic type are known to be susceptible to steam distillation and as can be seen

in the table the loss of material during drying is quite pronounced. The combination of loss in the forming and drying stages makes this method of addition impractical in the average case.

In order to establish the fact that this loss of Ionol CP during drying resulted from steam distillation rather than from volatilization, a series of experiments testing the effect upon retention of variations in the water content of the sheet was performed. The data in Table II list the results of these experiments. In this work, the Ionol CP content of the sheet was determined according to the following procedure.

Analytical procedure: A sample of the treated paper of sufficient size to contain approximately 50 milligrams of Ionol is cut into strips ½ by 2 in. and placed in a Soxhlet extractor. Extraction with 150 ml. of absolute methanol for a period of from 2 to 5 hrs. follows. The alcoholic solution is combined with 100 ml. of distilled water and the mixture is then distilled until all of the alcohol and approximately half of the water have been carried over. The resulting solution is then analyzed for Ionol CP content by measuring the ultraviolet absorption at 2775Å. Comparison against solutions of known concentration enables calculation of the concentration in the paper. An alternate method of analysis of the extract, based on the reduction of phosphomolybdic acid to molybdenum blue has been described by Snyder and Clark (6) and a modification of this method can also be employed. In this work the spectroscopic method was used and proved accurate to  $\pm$  0.0075% in the average case.

A study of Table II shows that when the Ionol CP was added to bone-dry chipboard by means of a dry solvent solution and the solvent driven off at elevated temperature (1 hr. at 80 deg C.) the retention was quantitative. Prolonged heating of an essentially anhydrous system shows that the losses of Ionol CP are not attributable to its volatility. In the second case, where the solvent solution of the antioxidant was added to the board without first driving out the last few per cent of water, the losses amounted to somewhat more than half of the Ionol CP added even though only 3-5% water (based on the weight of paper) was present. Increasing the amount of water available, such as was the case in the third example where the Ionol CP was added as an emulsion (see Emulsion 2, Table V), causes even more serious losses, to a point where nearly all of the antioxidant is displaced.

It is apparent that the loss of Ionol CP is occurring through steam distillation rather than volatilization and it therefore follows that if the antioxidant can be added at a point where the paper will not subsequently lose water, then the losses will be appreciably minimized.

Such a method of application has been examined on a laboratory scale, both by adding the antioxidant as a solvent solution to dry (3% H2O content) paper followed by evaporation of the solvent at room temperature and also by drying the paper below its normal water content and then adding sufficient Ionol CP emulsion to return the sheet to the equilibrium water content. The results were in agreement with the hypothesis and, as can be seen in Table III, excellent retention was effected. When emulsions of Ionol CP and oil (such as Emulsion III, Table V) are employed, it is possible to spray or dip coat without passing the paper through a roll set; whereas, when emulsions not containing oil are used, the employment of a squeeze roll is desirable in order that the sheet be rapidly wet, since flocculation has been known to occur prior to penetration unless these rolls are employed.

The ratio of oil to Ionol CP necessary to insure good retention on aging as well as improved ease of emulsibility and application is variable. Optimum conditions are found at a ratio of three parts oil to one part Ionol CP; however, ratios of as low as one part oil to one part Ionol CP have been used with good results.

Consideration of these data shows that to have the best retention it is necessary to add the Ionol CP at a stage where subsequent treatment will involve driving only a minimum of water from the sheet. Several possibilities have been investigated and the most promising for the average mill appears to be addition at the calender stack.

In this method the paper is "overdried" to a moisture content a few per cent below that desired in the finished paper and, in the subsequent calendering operation, an Ionol CP emulsion (such as Emulsions 1 or 3 in Table V) is substituted for the moistening water normally used. Adjustment of the concentration of the emulsion to suit the "pick-up" of the sheet enables any desired concentration to be applied to the paper and, since there is no need to drive off water after this treatment, retentions of 90-100% of the antioxidant applied are obtained. The method is simple and requires no expensive alterations to existing equipment.

Addition is, of course, not limited to this location, although the use of a point further forward in the paper-making process will result in some decrease in retention. While conditions will vary from mill to mill, laboratory experiments indicate that addition of a suitable Ionol CP emulsion to the wet web, for instance at the size press, will result in a retention of 20-30%. A good generalization is that the further along the drier section the addition is made, the better will be the retention. It appears that suitable addition conditions can be found for most paper mills.

In view of the tendency of the phenolic antioxi-

Table 1: Retention of Ionol CP in beater addition

	Sample 1	Sample 2	Retention % of total
Ionol CP applied, % wt. (added as emulsion to pulp slurry)	0.50	0.50	
Ionol CP present after sheet is formed, % wt.			
(dry basis)	0.24	0.18	48-36
Ionol CP present after sheet is dried, % wt,	0.036	0.039	7-8

Table II: Retention of Ionol CP vs. water content of chipboard

	added,	Found by analysis, % w.	Retention % of total
Added as solvent solution to			
bone-dry chipboard, then			
dried 1 hr. at 80°C	0.50	0.50	100
Added as solvent solution to			
chipboard containing			
3.5% H <sub>2</sub> O, dried as above	0.50	0.22	ca 44
Added as emulsion to chipboar	d		
containing 3-5% H₂O			
Emulsion = $20\%$ N.V.),			
dried as above	0.50	0.042	ca 7

dants to steam distill, it is expected to find that treated papers suffer some loss of antioxidant on aging. As the humidity of the surroundings fluctuate, the moisture content of the paper will change, resulting in alternate drying and moistening of the paperboard. This change in moisture content causes a certain amount of loss of antioxidant just as does the drying of treated paper. It has been found, however, that remarkable improvement in retention of the antioxidant can be achieved if it is employed as a solution in an inert, high-boiling solvent such as oil, wax or similar materials.

Table IV shows the results of cycling treated papers from a humid to a dry atmosphere. In this test, samples prepared both with and without an oil solvent were subjected to an atmosphere of 50% relative humidity and then to an atmosphere of 0% relative humidity. This very harsh treatment was repeated for five cycles, each cycle consisting of 24 hrs. at each of the extremes of humidity. Such a treatment is, of course, far more drastic than would ever be obtained in service, but it serves well to illustrate the losses possible. A study of the data shows that in those papers containing antioxidant plus solvent (in this case a white mineral oil) very satisfactory retention was found even under these extreme conditions. In the papers treated with antioxidant but lacking the solvent, the losses were appreciably greater. The solution of Ionol need not be

Table III: Retention with simulated addition at dry end of machine

			Retention,
Ionol CP added a solvent solution to dry (3% H <sub>s</sub> O content) paper; dried at room temp.	0.50	0.50	100%
Ionol CP added as emulsion to bone-dry paper, no subsequent drying <sup>a</sup>	0.50	0.48	96%

 $<sup>^8</sup>$  Conc. of emulsion adjusted to ''pick-up'' of paper to give  $3\%~\rm{H_2O}$  content after treatment.

Table IV: Change in Ionol CP content after aging at varying humidities

	Ionol CP co	ontent, % w.	
	Before cycling	After 5 cycles <sup>a</sup>	Retention, % of total
Ionol CP	0.344	0.052	15
Ionol CP plus oil	0.082	0.053	65

<sup>&</sup>lt;sup>a</sup> Each cycle consisted of storage of paper for 24 hrs. at 50% R.H., 70°F, followed by 24 hrs. at 9% R.H., 70°F, Relative humidity of 0% obtained in closed vessel containing Drierite.

restricted to oil, since incorporation in waxes, resins or similar material will have a similar effect.

While no data are presently available, it should also prove true that the use of an oil-Ionol CP system would improve retention during addition, notably in those cases where only moderate losses are found with the normal Ionol CP emulsion. In those application methods where severe losses are encountered, i.e., beater addition, the oil-antioxidant system probably would not improve retention sufficiently to make such a method of addition desirable.

Comparison of Ionol CP with the other phenolic inhibitors permitted for food use shows that Ionol CP is not unique in its tendency to steam volatize, but that the losses for all of the antioxidants are of the same order of magnitude. All appear to respond to the use of an oil system to approximately the same degree.

The use of an inert oil or similar material in conjunction with the antioxidant also offers additional advantages, namely, ease of emulsification and application.

#### Organoleptic evaluation

The following procedures are modifications of the organoleptic methods currently used by several national food-packaging laboratories. These methods have been found to be the most reproducible procedures for evaluating Ionol CP as an inhibitor for retarding the development of rancidity in paper-board which has been used to package fat- or oil-containing foods.

In a search for a standard media that could be depended upon to yield reproducible rancidity results in paperboard, it was found that a bland, unstabilized lard would produce the best results. Such a lard was used and when incubated in closed glass bottles at 100 deg. F. became rancid in the range of 20 days.

It was found that rancidity could be most easily identified by the nose. A badly rancid sheet had a very sharp and disagreeable odor which could be very easily recognized by its characteristic smell. Preceding this odor, however, was a sharp irritating sensation felt in the back of the nasal cavity. This sensation indicated the initial stages of rancidity and, since the consumer is interested in the incipient stages of rancidity, it was the appearance of this sensation which was used as the end point of our tests.

In order to reproduce conditions that might be expected in the absorption of fats from packaged food, the standard lard was smeared on test specimens of paperboard. These samples were then periodically tested for the presence of the irritating odor which indicated incipient rancidity.

Some confusion in the early test results was introduced by the use of an overabundance of lard on the sample. It was found that the paperboard would absorb about 15% of its weight of the standard lard. Any excess of lard over this amount would run into the bottles, where, denied the protection of the antioxidant, it would rancidify rapidly, making the test worthless. Restriction of the lard to the amount absorbed by the paper eliminated this problem.

It was found to be most convenient to incubate the bottled samples in a regulated air oven. Three temperature ranges for testing were examined, namely, 145, 125 and 100 deg. F. The accelerated 145-125 deg. ranges gave an indication of the relative stability of the various samples; however, they did not correlate with actual performance as well as the 100 deg. F. test. The latter test appeared quite satisfactory, yielding good, reproducible results which were felt to correspond with actual performance.

The test method employed was as follows: a 3-by-6-in. sample of the board to be tested was weighed and then folded every 1/2 in. along the long dimension. This folding resulted in an accordion-pleated sample which could be inserted into a bottle in form of a loose cylinder and would expand sufficiently to lock itself in an essentially immobile position in the bottle. Prior to placing the sample in the bottle, a quantity of the standard lard not to exceed 15% of the weight of the paper was carefully smeared on one side of the board. Care was taken to leave a margin of lard-free paper at the four edges of the sheet. This was necessary to avoid migration of the lard onto the surface of the bottle during insertion of the sample. A 4-oz. bottle with a metal cap from which the liner has been removed was used for this work. The bottles were then placed in an oven regu-

Table V: Ionol CP emulsions

Emulsion 1		Emulsion 2	2	Emulsion 3	1
Ionol CP	95	Ionol CP	95	Ional CP	) c
Crown 1035		Crown 103		Ionol CP Mineral oil	100
waxa	5	wax	5	2-22-10-142 031	,
Armeen Tb	5	Oleic acid	5	Oleic acid	5
Armac CDb	7	NaOH	0.7	NaOH	0.7
Water	To suit	Water	To suit	Water	To suit

a Petrolite Corp.

Armour Chemical Co.

Oil-lonol CP ratios of from 1:1 to 3 oil to 1 Ionol CP are acceptable.

Dimum emulsibility is found at 3:1 oil to Ionol.

Note: The Ionol CP and wax (or oil) was heated until dissolved, the emulsification agents added and the mixture warmed to 80-90 deg. C. The saponification agent was added to the water and heated to 90 deg. C. The water phase was added to the non-aqueous phase with vigorous agitation (Eppenbach Homomixer) and the stirring was continued until the temperature of the emulsion was below 70 deg. C.

Table VI: Effectiveness of Ionol CP-treated laboratory hand sheets

	100°F.	125°F.	145°F.
Plain lard	144 hrs.	24 hrs.	24 hrs.
Untreated lab sheet Lab sheet treated	144 hrs.	24 hrs.	24 hrs.
with 0.5% Ionol CP	3,360 hrs.	1,248 hrs.	552 hrs.

Table VII: Effectiveness of Ionol CP-treated board from mill runs

	100°F.
Plain lard	30 hrs.
Board B — Untreated	30 hrs.
0.1% Ionol CP	7 days
0.2% Ionol CP	31 days
0.3% Ionol CP	More than 83 days

lated to 100 deg. F. ± 2 deg. F. and maintained at this temperature for the remainder of the test period. Samples were checked daily for the presence of the sharp, irritating odor indicating incipient rancidity. The testing was performed while the samples were still warm, since it has been found that detection of incipient rancidity is easier on warm samples.

Care must be taken to insure that the bottles used are clean and dry, and that the standard lard is kept refrigerated and exposed to the atmosphere as little as possible during the course of preparation of the samples.

The above-described test has been used to evaluate the rancidity-inhibiting properties of Ionol CP on laboratory hand sheets and on paperboard prepared during mill runs. In the laboratory experiments, hand sheets were prepared containing approximately 0.5% Ionol CP before drying and were compared with similar but untreated hand sheets at three temperatures. In the mill runs, board was impregnated with varying amounts of Ionol CP and compared with untreated board at an incubation temperature of 100 deg. F. The results of the tests are shown in Tables VI and VII.

The data show clearly that Ionol CP is quite effective in retarding the rancidity of the lard even at concentrations as low as 0.1% antioxidant. Increasing concentrations of Ionol CP also result in increased shelf life, a finding which will be of value in application where a high degree of protection is necessary for exceptionally long periods.

#### Summary

A study has been made of various methods of adding Ionol CP antioxidant to paperboard during its manufacture. Add- [Continued on page 195]

## Cellophane pliability tester

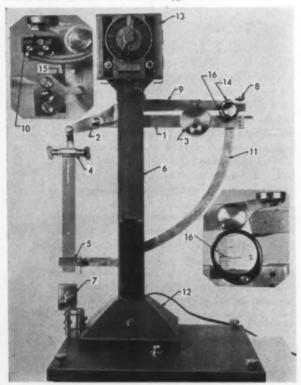
Instrument measures moisture loss or gain by stretch of film sample, which is found to be roughly proportional to the moisture content

By John D. Conti\*

Over the years there has been a demand for a quick method of checking the moisture content in cellophane to determine its suitability for machine running. The development by this laboratory of a high-speed cellophane conditioner and its adoption as part of the printing process by an increasing number of converters has emphasized this need.

Available methods and equipment for testing moisture content and pliability of film are not only

Fig. 1. Avisco cellophane pliability tester, numbered with reference to text. Close-ups inset at upper left and lower right show details, back and front, at junction of the calibrated radius bar and the horizontal support arm.



time consuming, but costly and require a certain amount of technical skill which is not always readily available in packaging and printing plants. With this end in mind, we have been experimenting for some time with a stretch, or pliability, method for determining the moisture change of cellophane as a result of moisture loss and/or regain through printing and rehumidification.

The test is based on the principle of cellophane's tendency to stretch in relation to its moisture content. A sample strip of cellophane (running parallel with the machine direction, not with the cross-machine direction) is subjected to a constant weight load for a predetermined time. The amount of stretch experienced by the sample is translated into moisture loss or regain by comparing it with results obtained on the same material before processing. Moisture content as such is not given, but it has been proved that stretch results can be correlated with the moisture content of the film.

The cellophane-pliability unit was developed by our Technical Service Dept. primarily to be used with the Avisco conditioner.

#### Tester and its use

The tester (Fig. 1) consists of a horizontal beam (1) with a ratio of five-to-one leverage, pivoted on a sensitive bearing (2) with an adjustable weight (3) on the long end of the beam. To the short end of the horizontal beam is attached an eccentric clamp (4), to which one end of a cellophane strip 1 in. wide and 11 in. long is clamped. The other end of the cellophane strip is guided in between the open jaw of the quick-lock stationary clamp (5) mounted on the frame (6). To the lower end of the cellophane strip is attached a predetermined weight (7—combination clamp and weight) which applies uniform tension to the cellophane before it is securely clamped between the two jaws (5). The time and weight depend on the type and gauge of the film being tested.

The device is comparatively simple to operate, requiring no special skill. After placing the cellophane in position, the first action is to unlock the

<sup>\*</sup> Manager, Technical Service Dept., Film Div., American Viscose Corp., Philadelphia.

beam, accomplished by depressing the button lever (8) mounted on a stationary support arm (9). This action permits stretching of the cellophane. It simultaneously closes the circuit through a microswitch (10-inset at upper left) which starts the timing mechanism (13) which in turn energizes the solenoid (12-mounted inside the frame) for a predetermined time. The solenoid is connected to the lower end of the calibrated radius bar (11), drawing it inward (a spring holds it outward) from its pivot position (14). This action also allows clearance between the rubber brake block (15-upperleft inset) mounted on the far end of the beam on the reverse side. The de-energizing of the solenoid at the elapsed time by the timer allows the springheld radius bar to spring back into its normal position, thereby locking the horizontal beam against the rubber brake block mounted on the calibrated radius bar. By using a five-to-one ratio, the reading (adjustable indicator #16-close-up in lowerright inset) on the calibrated radius bar can be translated to show the exact amount of stretch (in mm.) of the film under test.

#### Laboratory reports

Samples of 300 MS-3 cellophane (standard moistureproofness and extra strong heat seal) were tested on an "as-received" basis on the Avisco cel-

Fig. 2. Curves correlating the pliability instrument readings with the actual laboratory moisture-content analyses of same samples indicate the tendency of 300 MS-3 cellophane to increase in stretch as the moisture content increases. The solid curve is an average of the results obtained.

### PER CENT MOISTURE Tests performed on 300 MS-3 cellophane

14 — 12 — 10 — 8 — 6 — 4 — 2



Fig. 3. Operation of instrument requires only a simple reading of sample's stretch as indicated on calibrated radius bar, viewed through magnifier attached to moving beam.

lophane-pliability unit. Samples from each of the rolls tested were forwarded to the Physical Testing Section for analysis of moisture, plasticizer, thickness and gram weight.

Comparing results of moisture and stretch determinations, as indicated below, substantiates the test principle: that the amount of stretch of a predetermined area of cellophane is, within certain limits, relative to the amount of moisture in the cellophane.

Per cent moisture	Stretch
$6.5 \pm .7$	$12 \pm 1$ cm.
$6.0 \pm .7$	$10 \pm 1$ cm.
$5.3 \pm .7$	$8 \pm 1$ cm.

The solid line on the graph shown as Fig. 2 indicates the tendency of 300 MS-3 cellophane to stretch as moisture content increases. It is also apparent that within the normal moisture range of 300 MS-3 cellophane, stretch increases rapidly with finer increments of moisture. Based on this, it can be seen that under the normal moisture range a stretch of 8-12 cm. can be expected; below horizontal line (lower limit of normal), indication of moisture in the film can quickly be detected.

It can also be stated that the moisture content is the primary factor in the stretch or pliability of cellophane, with the plasticizer being a secondary factor. The thickness [Continued on page 183] This consultation service on packaging subjects is at your command, Simply address your questions to Technical Editor, Modern Packaging, 575 Madison Ave., New York 22, N. Y. Your name or other identification will not appear with any published answer.

#### Polyethylene contamination

Q. We have developed a small specialized kit for toiletries and cosmetics. We plan to place several polyethylene bottles in the kit. Can you tell us what kind of products might cause problems or even the deterioration of the polyethylene? The containers will be refilled and used many times and we cannot, of course, be sure what products the consumer will put in them. Your advice and recommendations will be greatly appreciated.

A. The use of polyethylene bottles as refillable packages for any and all kinds of cosmetics and toiletries can result in some unique problems and complaints. However, you should realize that the polyethylene will not be appreciably deteriorated by these products.

The problems result from permeability of polyethylene to many oily and aromatic substances. The fragrances, perfumes and oils used in cosmetics or toiletries can go through the walls of a polyethylene bottle and remain on or evaporate from the outside surface. This continued permeation will cause products placed in the bottle to change or lose their characteristic aroma or taste. Also the escaping aroma will be absorbed by clothing or other products confined near the container. The polyethylene bottle will also become saturated with the taste and aroma of a product and these residues will contaminate other products which might be put into these bottles.

Much work has been done and published about these problems and the manufacturer who uses plastic bottles has to formulate his products carefully to stabilize them against this permeation effect. Unfortunately, you do not have any control of the product that will be put into your bottles.

Plastic bottle manufacturers have

been working on linings or interior coatings to prevent absorption and permeation, and have had considerable success in this development. It is suggested that you try some of these lined bottles with a variety of toiletries and cosmetics, using unlined polyethylene bottles for comparison.

#### Film delamination

Q. We are testing a special plastic film lamination in the form of a small pouch. The film is a lamination of acetate and vinyl film and the adhesive must be transparent. When we first receive the pouches they appear ideal for our use. However, in a few weeks the adhesive becomes soft and the heat seals delaminate very easily. Also there is some wrinkling and loss of transparency. We would like to use this laminated film, but how can we be sure of its stability?

A. The deterioration of this laminated vinyl and acetate film is unquestionably due to migration of the plasticizer. Either of the two films and the laminating adhesive can carry plasticizer. The extraction and mixing of these plasticizers can cause the effect you have noticed. It is typical that it may take some time for delamination to occur and it results in a serious degradation of a laminated structure.

The answer is to try various combinations of films and adhesives until you find one that is stable. However, your supplier should realize that it would be dangerous to change ingredients after a stable combination has been found and received approval for use.

#### Package-material storage

Q. We use many kinds of packaging materials in the form of rolls for conversion into labels, bags, wrappers, pouches, etc. Some of these packaging materials are held in storage for periods of well over a year. From time to time we notice sticking and blocking in some materials and sometimes this necessitates rejection of the roll as defective merchandise. We are considering making a new roll storage area. Are

there any special considerations we should observe in making such storage space?

A. The blocking or sticking together of adjacent surfaces of packaging materials, either in roll or stack form, is due to many causes. The cause of blocking of a given class of materials is usually predictable and can be avoided by controlling the conditions and the time of storage. However, there are also many degrees of sticking or blocking, and some of these appear to be inherent in particular classes and types of

For example, a very smooth-surfaced plastic film carrying considerable plasticizer will tend to cling and resist unrolling even after short periods of cool storage. This type of stickiness cannot be entirely eliminated, because it is a result of the air being forced out of the surfaces which are in contact and the tendency of one surface to "wet" the other.

Generally, the best conditions of storage for all materials are cool temperatures with humidity control. The cellulosic materials like cellophane and paper require enough humidity in the air to prevent drying out of the material and a resultant loss of strength.

Ideal roll storage would be to support the rolls on rods through the core, but storage on the roll end may be more practical. Coated, waxed or plastic materials and metal-foil rolls should never be stored on their sides. Generally, blocking which is severe enough to cause damage or complete loss is due to excessive pressure and heat. NE

phane

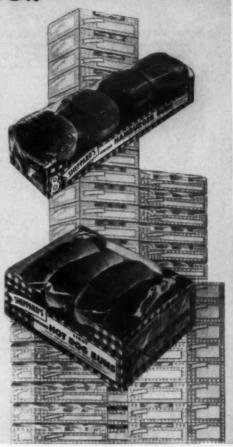
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## "Sales increased 25-30%

when we switched to printed trays overwrapped in Olin Cellophane. Our Sheppard brand hotdog and sandwich buns gained a 'visibility' they hadn't had before—extra appetite appeal that's earning almost one-third more sales. Our dealers and routemen are enthusiastic because Sheppard products now look their sales-making best. In sales, distribution and packaging savings, our change to





Whether your immediate aim is increased sales, broader distribution, or lower packaging costs, look into the possibilities of tray packages overwrapped with Olin Cellophane. You'll get the bright visibility that means increased impulse sales, plus the durability and protection that cuts down returns. And if you're interested in supermarkets—and who isn't—remember that an Olin Cellophane tray overwrap meets the "musts" of today's fast-turnover, self-service shopping. It stacks easily and combines high brand identification with full visibility and product protection.

Write today to the Olin Film Division or to your converter of Olin Cellophane for free specialized assistance, Olin Film Division, 655 Madison Avenue, New York 21, N. Y.



#### NEW OLIN CELLOPHANE PLANT STARTS PRODUCTION IN FALL

To meet the growing demand for Olin Cellophane, a second plant — America's newest and most modern for the production of quality cellophane—is now under construction in Olin, Ind.

OLIN MATHIESON
CHEMICAL CORPORATION

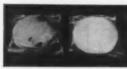




### **Equipment and materials**

#### A new material for vacuum or gas packaging

has been developed by the Research and Engineering Div. of Standard Packaging Corp., New York, for its Flex-Vac Division in Clifton, N. J. The primary combination consists



of specially treated Mylar/special adhesive/150- or 200-gauge polyethylene. Mylar is DuPont's polyester film. The company reports that the special Mylar offers high tensile strength, impact

resistance, thermal stability, clarity, dimensional stability, chemical resistance, good ultraviolet-light, gas and moisture barrier qualities; the adhesive provides a good bond, and the polyethylene contributes heat sealability, chemical resistance, good aging and low-temperature characteristics. The material is recommended by the supplier for packaging all types of air-sensitive products. It is said to have found most extensive application to date in Flex-Vac vacuum and/or inert gas packaging of luncheon meats, frankfurters and cheese. Illustrated are two packages held for more than 90 days, the one at the right packaged in conventional film and the one at the left in the new "VCA" film.

#### A new system of aerosol propellents

employing combinations of gases such as helium, argon, neon, nitrous oxide and carbon dioxide has been announced by the Connecticut Chemical Research Corp., Bridgeport, Conn., contract loaders. The new system, called "Polysol, is said to employ non-refrigerant, compressed gases singly, in combination with each other, or in combination with the conventional liquefied, fluorinated hydrocarbon gases. The Polysol system is said to employ new types of valves and new processing methods. Conn-Chem reports that Polysol will permit formulation and packaging of products such as antiperspirants, depilatory compounds, body rubs, mouth washes, medical inhalants, disinfectants and the like.

#### A versatile plastic packaging machine

that can vacuum draw skin packs, with or without cards, or form bubble cavities out of roll plastic stock, has



by Plastic Packaging Machinery, Inc., 333 Sunset For skin Wash. packaging, a heatplastic sheet is drawn over the product, which is used as its own mold, by vacuum, and, when cooled. forms a transparent skin-tight en-

closure. The forming of bubble cavities for later product loading is made possible by the use of a mold over which the plastic sheet can be drawn. The machine is especially recommended for packaging such hardware items as knobs, drawer pulls, hinges, etc.

#### Three developments in metal containers

have been announced by Continental Can Co., 100 E. 42 St., New York 17. Frozen juice concentrate cans with cemented side seams are now available in 6-oz. (202 x 314 can), 12-oz, (211 x 414) and 32-oz. (401 x 509) sizes.

A high-bake "Perma-Lined" steel shipping container that uses the new airless hot-spray method of enamel coating, reportedly giving 100% protective coverage with a uniform film thickness, is recommended by Continental Can for foods such as jellies, jams, syrups; and for chemicals, paints, motor oil, grease, liquid detergents, printing inks and glues.

Eas-E-Namel release agents for quicker, easier removal of food products from cans are now available from Continental Can in pet-food and luncheon-meat cans.

#### An improved collapsible metal tube

announced by Aluminum Co. of America, Alcoa Bldg., Pittsburgh 19, Pa., is reported to solve the problem of preventing screw-eye tubes from per-

manently resealing themselves once dispensed adhesives, dyes or other hard-tohandle substances and also to eliminate the hazard of having excessive amounts of product gush forth when the





tube is squeezed. This new "dripless" tube is an impact extrusion and features a longer nozzle, crimped around the circumference about 1/4 in, below its open end. The crimp, a depressed annular ring, acts as a seat for the pointed end of the screw eye and also seals off the tube's content from the nozzle tip. The cross-sectional diagrammatic drawing, illustrated here with a photograph of the tube, shows extent of depressed annual ring at end of tube.

#### A new straight-line automatic filler

introduced by the Packer Machinery Corp., 30 Irving Pl., New York 3, is a pneumatically operated, electronically controlled, vacuum liquid-filling machine. This Model PVA is available in 12, 14 and 16 stainless steel spout assemblies with valve-type nozzles. It fills all types of foamy and still liquids, hot or cold, into containers ranging from fractional ounces to gallons. A separate push-button control is provided for manual use of the machine for short runs if necessary. Features of the machine are its simplicity of operation, quick change-over, automatic overflow system and low-cost maintenance.

#### A small vacuum-forming machine

for making sample formed parts or market testing skinpack packages has been introduced by the Auto-Vac Co., 1986 State St. Ext., Bridgeport 5, Conn. Known as the Lab-Vac, this new low-cost testing machine has a maximum forming area of 16 by 16 in. It is fully



equipped with drape mechanism, with a 7-in. stroke, clamping frame, high-temperature heater, vacuum pump and reservoir tank. The supplier reports that the machine is adaptable to the use of all thermoplastic sheet materials.

#### Precision extruded nylon dip tubes

for aerosol containers are now being supplied by the Anchor Plastics Co., Inc., 36-36 36 St., Long Island City 6, N. Y. They are reported to stand up in use where other materials fail and are suggested for use with fire extinguishers and such products as paint, where high concentrations of solvents are encountered. The nylon tubing

# IF YOU PACKAGE IN Jars... OR IN Vials



ere loaded with ideas that will increase sales, reduce shipping costs for you

- ★ 1/5 the weight of glass
- \* Shatter proof

- \* Easy to print
- \* Moisture tight, dust-free

Tell us the size and type plastic container you need-we'll supply it. Chances are that among the infinite variety of shapes, sizes, closures and colors we are now producing, there is one that will fit your exact needs-without mold costs.

The jewel-like colors of Clearsite containers bring extra sales sparkle to your product. They are easy to multi-color print with your trade mark or label.

Because they are moisture tight, dust proof they protect your product right through to the customer. And because they are shatter proof, you minimize breakage costs, and their light weight drastically reduces shipping charges.

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#### CELLUPLASTIC CORPORATION

SALES AND EXECUTIVE OFFICES NEWARK, N. J.

TRANSPARENT PLASTIC CONTAINERS that Sell

The world's foremost manufacturer of plastic jars and vials



## USE <u>JET-PAK</u> CUSHIONED-INSULATED OR VCI-LINED CUSHIONED BAGS

Insert product in bag...fold...tape or staple—that's how easy it is to use JET-PAK insulated bags.

VCI-LINED CUSHIONED BAGS blanket ferrous metal and aluminum products with an invisible, dry vapor that provides better protection than costly, time-consuming greasing... avoids future degreasing.

CUSHIONED-INSULATED JET-PAKS are ideally suited for economical shipping and warehousing of most small products, books, etc. These two new JET-PAK insulated bag lines are moisture-resistant, lightweight, reusable, durable, economical—they provide products with positive protection against rough handling and damage. Available in 12 popular sizes from 5" x 10" to 14¾" x 20". Write for samples, prices and catalog.

JET-PAK INC. 855 Summer Ave., Newark, N. J.



#### **Equipment and materials**

comes in both hard and soft grades. Anchor Plastics also supplies, in production quantities and at low cost, precision-cut tubes for aerosol containers with tolerances as low as ±0.010 in. on a 5-in. length.

#### An improved fruit and vegetable tray

announced by Standard Folding Trays Corp., 85 St. & 24 Ave., Jackson Heights 69, N. Y., incorporates all the



features of the company's Tripl-Tite trays and features new tapered ends. The ends of the tray are designed so that, while they can still be efficiently overwrapped at high speeds, the bottom of the tray will be longer than the top, enabling stacking in transit and at retail. The accompanying diagram illustrates the new feature, which the company states should

eliminate the cost of dividers at the packaging point and enable retail displays without bruising contents.

#### A new, economical labeling machine

for all types of packers using round containers has been announced by The Labelette Co., 2611 W. Leland Ave., Chicago 25. This versatile machine will handle containers ranging in size from 1½ oz. to 1 gal. without special attachments. It will apply a spot, face or wrap-around label at speeds up to 60 units per minute on glass, tin or fibre containers. The unit is mounted on a mobile floor stand and occupies a floor space of only 33 by 19 in.

#### Three new foil-laminated cartons

called "Make-A-Pan" have been introduced by Marathon Corp., Menasha, Wis., for "heat 'n serve" food products. No. 50 style is a leakproof, one-side foil laminated carton



that opens into a tray, developed for such items as meat with gravy, chow mein and chop suey. After product loading, the tray is closed and becomes a conventional carrying carton, then opens up when ready for use into a tray with rigid side walls. It is de-

signed to withstand oven temperatures up to 425 deg. F. for a half hour. No. 55 style, for pre-cooked chicken parts, fish sticks and shrimp, also opens into a tray for home heat-in use. A two-sided foil-laminated carton incorporates the same tray features as the No. 50 and No. 55 styles, but is a mechanical locking, non-glued package. Its double foil protection reportedly withstands oven temperatures of 475 deg. F. for 45 minutes.

#### A new automatic carton top-flap gluer

introduced by General Corrugated Machinery, Palisades Park, N. J., is reported to save time and labor because it is



always ready for use and requires no preparation or clean-up. The machine features a new "closed system" gluer. Inside flaps are folded flatwise and receive lines of glue in adjustable

quantity as required, then top flaps are folded down to enter the compression unit. Application of glue is spaced Here's a molded cap
with the look...
and texture...of leather



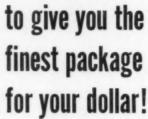
Now you can dress up your package with a cap that has the luxury look of leather—even to the octual grain. And this is just one of the many new design techniques now possible in molded caps. For an amazing molding process being pioneered by Armstrong permits far greater molding detail than has ever before been possible. With this process, names, trade-marks, figures, floral designs—all can be reproduced in sharp detail on the top ... or skirt ... of your molded cap. Get the whole stary from your Armstrong man or write Armstrong Cork Co., Glass and Closure Div., 5307 Chester St., Lancaster, Pa.

## Armstrong MOLDED CAPS

Watch Armstrong Circle Theatry every other Treeday evening an NBC-TV

## The versatile "OLIVER" wraps and labels products





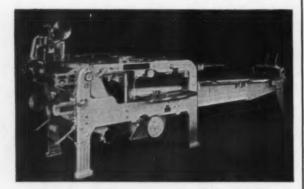


An "Oliver" handles a surprising wide range of package sizes. Its one-man operation and quick-adjustability speed production.



Paper specialties, textiles, baked goods, meats, and products only remotely similar . . . the Oliver wraps them securely, neatly, rapidly. Using modern packaging materials it heator glue-seals your package for utmost protection. A smart diecut label can be heat-sealed to the package. The quick-adjustability of the Oliver keeps the unit cost low. Each of 7 models handles packages in a wide range of sizes at speeds up to 50 a minute. Printed wrappers are registered by an electric eye. The many Oliver fea-tures - plus the Roll-Type Labeling System - save you dollars every day. Write now for complete details.





"Oliver" Wrapping Machine

with Automatic Roll-Type Labeling System

OLIVER MACHINERY COMPANY -

GRAND RAPIDS 2, MICH.

#### Equipment and materials

according to inside flap spacing. Size of the machine is smaller than normal because top flaps of boxes are not folded outwardly to receive glue. A single hand wheel makes adjustments for box width and height. Make-ready time is reported to be only 3 minutes.

A new aerosol propellent injector

for bottles and cans announced by the JG Machine Works, 452 W. 46 St., New York 36, is reported to have a speed



of up to 30 injections per minute, depending on the quantity of propellent and the container valve. The machine is equipped with cycling devices that prevent a repeat injection without first removing the container and re-inserting it. Hand-wheel adjustments for height of container head and propellant capacity are standard equipment. A coil for cooling to prevent flashing is supplied as standard equipment. Injection capacity ranges up to 300 cu, cm. of liquid and injections down to 5 gm. have been accurate to ±0.75%, ac-

cording to the supplier. The unit is air operated and electrically controlled and operations can be semi-automatic or fully automatic. Components of the unit can be supplied for insertion into existing automatic machinery.

An automatic weigher and bag filler

for net and gross weighing and filling has been announced by Pack-Rite Machines, 407 E. Michigan St., Milwaukee, Wis. The new Weigh-'N-Bag machine can be used for a wide variety or products normally packaged in bags, such as potatoes, onions, apples, oranges, radishes, nuts, candy and other items. Its capacity is about 400 weighings an hour and weighing range is from 1 to 25 lbs.

A new corrugated bulk container

which holds approximately 200 lbs. has been announced by Gaylord Container Corp., Div. of Crown Zellerbach



Corp., 111 Fourth St. Louis 2, Mo. The Junior bulk pack incorporates construction principles used Gaylord's bulk tainers and is designed as an economical placement for containers of other materials,

and shapes. It consists of two sleeves and a top and bottom lid, with the inner sleeve slipping into the bottom lid and the outer sleeve then being dropped over the bottom lid and being capped by the top lid. No special closing machinery is required, since the rectangular box is merely steel strapped in two directions after filling. The product to be shipped determines the size of the actual container.

A new air-operated stamping press offered by the Peerless Roll Leaf Co., Inc., 4511 New York Ave., Union City, N. J., known as the Model AA, has built-in toggle action. It is designed for hot stamping on cloth, paper, leather, wood, fibre, soft and hard plastics and most other materials. Speed adjustment permits up to

# For over 24 years FISKE BROTHERS REFINING CO. has specified Tri-Sure Closures



-the time-tested way to prevent LEAKAGE

> SEEPAGE TAMPERING CONTAMINATION



Fiske Brothers Refining Co. of Newark, N. J. has standardized on Tri-Sure\* Closures since their inception in 1932, and prior to that used "American" Flanges and "Tamper-proof" Seals, the forerunners of Tri-Sure Closures.

Year after year, Tri-Sure Closures guard Fiske's Oils, Lubricants, and Greases, which are shipped all over the world, and Lubriplate, the specialized lubricants that are widely used throughout the United States. Year after year these fine Fiske products are kept secure from leakage, seepage and contamination by the Tri-Sure Flange, Plug and Seal the dependable way to safeguard every gallon, in every drum, in every shipment.

The best solution to your closure problem—the surest way to prevent losses from drums-is to use the closures that have been time-tested for a quarter of a century. When you order drums, always specify "Tri-Sure Closures."





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\*The "Tri-Sure" Closure is a mark of reliability backed by over 35 years serving industry. It tells your customers that genuine Tri-Sure Flanges (inserted with genuine Tri-Sure dies), Plugs and Seals have been used.

AMERICAN FLANGE & MANUFACTURING CO. INC., 30 ROCKEFELLER PLAZA, NEW YORK 20, N.Y. CHICAGO, ILL. . NILES, OHIO . LINDEN, N. J.

Tri-Sure Products Limited, St. Catharines, Ontario, Canada
Tri-Sure S/A Indústria e Comercio, Sao Paulo, Brazil
American Flange & Manufacturing Co. Inc., 31 Macquarie Place, Sydney, Australia
B. Van Leer N. V., Stadhouderskade 6, Amsterdam, Holland
Van Leer Industries, Ltd., Seymour House, 17 Waterloo Place, Pall Mall S.W. 1, Landon, England

#### HIGH SPEED ROTARY VOLUMETRIC FILLING MACHINES

For Free-Flowing Powders and Granulated Materials

- CLEANSERS **DETERGENTS POLISHERS**
- SOAP POWDERS BOWL CLEANERS
   LYE
- CEMENT AND PLASTER FEEDS .
- DRY POWDERED CHEMICALS INSECTICIDES
- \* STURDILY BUILT

MANUFACTURED BY

- \* SIMPLE IN DESIGN
- \* NO SKILLED HELP REQUIRED TO OPERATE!

The photograph shows one of several types of fillers designed to handle a variety of products and container sizes with filling capacity to 400 containers per minute. THESE MACHINES ARE IN USE BY THE MAJOR PRO-DUCERS OF CLEANSERS, LYES, BOWL CLEANERS, ETC. AND FORM THE BACKBONE OF THEIR PRODUC-TION LINES.

All rotating parts are housed in dust-sealed bearings, which makes the machine particularly adaptable for filling cleansers and other abrasive products.

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Denver Hackensack Los Angeles Seattle

#### Equipment and materials

40 impressions a minute. The unit can be supplied with either foot or hand control, is automatically air operated and has automatic heat control. It is adjustable to feed up to 5\% in. of leaf in \%-in. graduations and handles leaf up to 6\% in. wide.

#### A new low-cost automatic bagging machine



that makes, fills and seals up to 60 pillow-style, single or double-wall bags per minute from roll stock has been introduced by the Triangle Package Machinery Co., 6633 W. Diversey Ave., Chicago 35.

This new Elec-Tri-Flex is reported to be practical for plants packaging as few as 3,000 bags per day. It is normally furnished with net-weight scales, but can be equipped for either volumetric or auger feed, or for hand loading. Production rate is governed by number of scales used and the rate at which they can weigh accurately.

The unit is simple in construction and easy to operate, according to the supplier, and complete change-over of product and film size can be accomplished in 10 or 20 minutes.

#### Multicolor reproductions on corrugated

and solid fibre boxes, by process printing using lithography, gravure or flexographic methods, can be accomplished by equipment available from Electronic Machine Parts, Inc., 204 Lafayette St., New York 12. The equipment permits the corrugated manufacturer to use pre-printed linerboard.

#### A line of wrapping machines

is now available from the Elgin Mfg. Co., 200 Brook St., Elgin, Ill., makers of filling and capping machinery. The company has acquired all manufacturing rights to Globe-Wrap and all present models and their developments in the future will be known as Elgin-Wrap.

#### A new counting machine

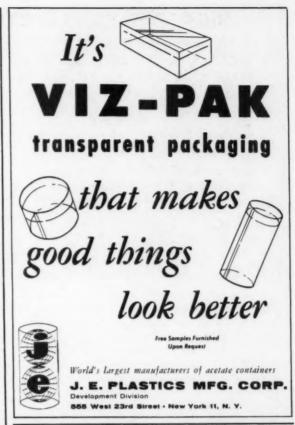
announced by the Electronic Products Div. of Post Machinery Co., Beverly, Mass., known as the Model F-2 Decitron Direct Impulse Counter, is designed for relatively slow counting operations. This light-weight, portable unit counts continually at speeds of five per second and will count up to 10 objects per second during sudden bursts. Any Post photohead can be used and, if desired, the counter can be located as far away as 100 ft. from the photohead, without pre-amplification.

#### An emboss-type code dater

to be used as an integral part of its rotary or continuousband sealers has been announced by Doughboy Industries, Inc., New Richmond, Wis. The emboss code is made as a package passes between heated metal type and a lead or rubber back-up roller. Both type and back-up are said to be easily removable for code changes, with up to six digits being usable on each side of the type holder, with one code being imprinted on each half-revolution. The unit is electrically controlled to place the code in the same position on each bag.

#### Two new metallized materials

have been introduced by Foiltone Products, Inc., sub. of National Research Corp., 70 Memorial Dr., Cambridge 42, Mass. Foiltone metallized polyethylene sheet is an alum-





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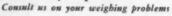
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THE EXACT WEIGHT SCALE, in use above, is used extensively by Meat Packers and Processors for weighing cuts of meat, steaks, roasts, etc. for freezing. Also adaptable to many other products and uses, the end tower design allows uninterrupted straight line production across the scale. Very short lever fall and an adjustable hydraulic damping action bring indicator to rest quickly-for a fast and accurate reading. Indicator travel of 13/4 inches equals 13/4 ounces over or under established weight. Optional dial graduations available

Model 273, above, has a 12 lb. capacity and is equipped with a 1 lb. beam, weight platter and counterweights. It is instantly adaptable to various products of different weights. To change the weight, simply change the counterweight.

EXACT WEIGHT manufactures over 800 model scales in a wide range of weight capacities and visual sensitivities. Especially designed for fast, accurate weighing and checkweighing in today's package production lines, there's an EXACT WEIGHT model to fit your needs and your product.



Model 213, left, has a 3 lb. capacity. Compactly built for use where space is limited, it is unaffected by machinery vibration and weighs accurately in out-of-level position.

letter quality control Better cost control

THE EXACT WEIGHT SCALE COMPANY

914 W. Fifth Avenue, Columbus 8, Ohio

In Canada: P. O. Box 179, Station 5, Toronto 18, Ont.

#### Equipment and materials

inum-coated polyethylene which can be printed with no special treatment. For product display, windows can be provided. The company's metallized Mylar, using DuPont's polyester film, is available in widths up to 58 in. for labels, heat and light reflectors, insulation, etc.

A new rotary labeling machine introduced by the MRM Co., Inc., 191 Berry St., Brooklyn 11, N. Y., affixes any size or shape label from postage-



stamp size up to 6 by 8 in. on containers ranging from fractional ounces up to gallons, with change of a minimum of parts. It operates completely matically except for feeding the machine. The operator merely inserts the container into the star pocket, then the label is affixed to the container, a pressure pad secures it and the container is discharged automatically. The unit can be integrated with a conveyor line. Only three simple hand adjustment wheels control the entire adjustment range of the new machine.

Nine special adhesives for plastics packaging have been announced by Paisley Products, Inc., 630 W. 51 St., New York 19. These Pliastic adhesives are based on synthetic resins, latices, lacquers and other organics and are custom formulated for maximum adherence to particular materials, such as polyester, polyethylene, highly waxed glassine, Pliofilm, acetate, polystyrene, saran, etc.

Printable polyester-film tapes developed by Permacel Tape Corp., New Brunswick, N. J., use Mylar film made by Du Pont, The two new pressuresensitive tapes, known as Permacel 95 and 951 are reported to be especially suited for labeling and sealing containers of the oils and solvents to which they are resistant. Because of their thinness, they are said to be less likely to be picked or rubbed off. Each tape has a one-mil Mylar backing that has been especially treated to permit high-speed flexographic and oil-base ink printing. Permacel 95 is transparent; Permacel 951 is available in red, black, white or chrome-metallized finish. Sizes range from ¼ to 23 in.

A semi-automatic heat sealer and gluer for automatic, square and flat paper bags has been announced by George H. Fry Co., Mineola, N. Y. It is designed to give a siftproof, double-fold heat seal and glue on heavy-weight bags or to double fold and glue plain kraft bags. The Model CSG is recommended for such products as chemicals, dog foods, milk powders, etc., which require a closure in which the bag top is not glued down against the contents.

A temperature-sensitive can-filling control announced by Crown Cork & Seal Co., 9300 Ashton Rd.,

Philadelphia, Pa., is designed to provide precision filling of cans by continuously correcting the amount of liquid or semi-liquid contents. As the cans are being filled, they conform to any temperature changes that might take place and cause the product to expand or contract, thus affecting volume of the contents. The device is said to be sensitive enough to keep volume under accurate adjustment to within 1/10 of 1%, eliminating wasteful overfilling. No manual temperature-control operator is required, since a temperature-sensing bulb in the filler bowl actuates a drive motor

COR



# PACKAGING-CHEAPER BY THE DOZEN



Here's proof. The bulk corrugated shipping container shown here, engineered by Gaylord, carries six dozen small electric motors with a total weight of 900 pounds. This development saved on container costs, cut packing time and reduced shipping weight.

For any type of corrugated or solid fibre container to make your shipping more efficient, contact your nearby Gaylord office.

CORRUGATED AND SOLID FIBRE BOXES . FOLDING CARTONS . KRAFT PAPER AND SPECIALTIES . KRAFT BAGS AND SACKS

GAYLORD CONTAINER CORPORATION \* ST. LOUIS.

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You Use FOR

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SOABAR'S MODEL 22 LABEL MARKER lets you handle imprinting jobs in your own plant ... eliminating costly ticket wastes and delays! Automatically marks, cuts, counts and stacks labels at the rate of 144 per minutel



- Rewind Device (optional)—Rewinds labels automatically!
- Ticket Stacker—stacks labels neatly, ready for attaching!
- Dial-Set Registers—let you change information at the flick of a finger, without resetting type! (optional)
- Label Dispensers that peel Quick-Stick labels automatically! (optional)



#### MARK ALL THESE LABELS ...

and many other sizes and styles of gum litho, heat-seal, Quick-Stick and box-end labels... on the versatile Model 221

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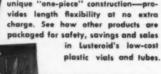
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PACKAGING

 New, helpful booklet shows why Lusteroid plastic vials and tubes are the economical and practical answer to your small item packaging and merchandising problems. Shows how Lusteroid's unique qualities provides complete protection for small itemseliminates the need for protective packing and partitioning—saves money in handling, packing and shipping. Illustrates how Lusteroid provides visible sales appeal for your product—permits free inspection—and turns shoppers into customers. Shows how Lusteroid eliminates labeling costs—cuts leakage and spoilage costs because of its unique "one-piece" construction-provides length flexibility at no extra charge. See how other products are packaged for safety, savings and sales



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Please send me: Tour helpful, illustrated booklet "How To Package Small Items".

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release agent that keeps films, waxes, si-hesives and other packaging materials fea sticking to heat-sealing equipment. Prevent pile-up, browning and ink smear; redess maintenance and cleaning costs.

Now available in both compound and sproy for quick, easy application to heat-seding and packaging equipment. SLIPICONE comes in 2 and 8 oz. tubes or 10 pound cans; SLIPICONE STRANCE of the seding a control bombs. SPRAY in handy 12 oz. aerosol bombs.

Get Slipicone today—the fast, clean, economical way to stop costly sticking. Write for list of Slipicone distributors.

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Dow Corning Corporation - Midland, Michigan ATLANTA . CHICAGO . CLEVELAND . DALLAS . DETROIT LOS ANGELES . NEW YORK . WASHINGTON, D. C. (Silver Spring, MAI)

### **Equipment and materials**

connected with the filler volume adjuster. The unit is available for connection with many types of filling machinery and is said to be particularly applicable to the petroleum, food, paint and chemical industries.

#### A new automatic net-weighing machine



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announced by The Exact Weight Scale Co., 944 W. Fifth Ave., Columbus 12, Ohio, is recommended for packaging, batching and weigh feeding of free-flowing products. The machine incorporates an even balance one-to-one ratio precision industrial scale with visual indicator; smooth operating net-weigh hopper; automatic cut-off controls, and over-under indicator for visual checking. The machine has two rates of feed, each fully adjustable for bulk and dribble. Two models are available, one handling up to 3 lbs. in weight and a larger one which has a capacity range of from 3 to 10 lbs. in weight.

An automatic loader for single-cell can bands has been developed by the Mechanical Packaging Dept. of Container Corp. of America, Philadelphia 27, Pa. The Concora Can Band Loader is a low-cost, flexible machine that is reported to be easily adjustable for loading a variety of can-band styles and can heights, diameters and multiples. It is said to be designed for use by packers with moderate-speed production lines or those who wish to use can banding for promotion or market testing at low cost. It is available on a short-term, monthly rental basis. One or two machines can be handled by a single operator.

#### A compact vacuum-forming machine

For experimental and short-run production use has been developed by Product Packaging Engineering, Culver City, Calif. The Model 12 Pak-O-Vac is completely self contained and operates semi-automatically, producing drape- or vacuum-formed packages from a broad range of plastic sheet materials or roll films. The operator loads the items to be packaged and moves



the oven into place. After proper pre-heating and dwell times once have been determined, they are automatically repeated by the machine without further adjustment. The machine is especially designed for experimental work to eliminate tying up large, expensive production equipment.

#### A new kind of packaging film

said to have unusual non-wetting qualities and resistance to fungus and hydraulic shock has been announced by Shamban Engineering Co., Culver City, Calif. Known as Califilm (polytrifluorochlorethylene, also known as fluorothene or Kel-F), it reportedly is tough, non-porous, clear, colorless and transparent in its natural state. Other properties are said to be lack of brittleness at low temperatures; inertness to organic and mineral acids, alkalies and corrosive solids and pastes; dielectric strength over a wide range of temperatures; and resistance to re-use or aging without becoming brittle. It can be heat sealed by conventional methods and has a useful temperature range from minus 120 deg, to 390 deg. F.



- Single unit handles two stages of liquid filling
   . . . product and propellent
- Includes vacuum crimp
- Air operated Explosion proof
- Precision designed and precision built
- Predetermines valve tolerance so each filling is accurate and complete
- Successful with every type of aerosol package
- Low maintenance cost. Easily serviced by your own mechanic

It will pay you to look into the new
Liquid Filler right away. We
can prove that this way your 12 oz. containers can be loaded at lower cost than
by the cold filling process.

... and the New Series 500

# Pres-O Valve

Fast filling • Accurate discharge rate • Approved for all pressurized products, foam and/or spray
 Bulletin No. 500 mailed on request

OIL EQUIPMENT Laboratories, Inc.

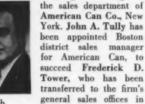
600 Pearl Street . Elizabeth New Jersey



# Plants and people

Plans for the merger of the businesses of Continental Can Co., Inc., New York, and Hazel-Atlas Glass Co., Wheeling, W. Va., have been announced. The agreement, which will unite an industry leader in the packaging field with a major manufacturer of glass containers, has been approved by directors of both companies and is subject to approval by Hazel-Atlas stockholders.

Edward K. Walsh, formerly assistant general manager of sales, has been appointed general manager in charge of





New York. American Can Co. has announced plans for installation of facilities for manufacturing beer and soft-drink cans in Detroit. The plant will be located at 8651 E. Seven Mile Rd. Ground has been broken for a can-making plant in Blue Ash, Ohio, a Cincinnati suburb.

Dr. Roger H. Lueck, vice president in charge of American Can's Research & Technical Dept., has been elected a director of the Industrial Research Institute. Fred C. Baselt, assistant to the general manager of research at American Can, is the new president of the American Society of Brewing Chemists.



Harry E. Engleson has been elected vice president in charge of manufacturing for the F. B. Redington Co., Bell-wood, Ill. S. V. Klein succeeds Mr. Engleson as works manager. Both men have been in the Redington engineering department for 35 years.

The Cornell Paperboard Products Co., Milwaukee, has created two senior vice president posts and has named Wesley W. Race senior vice president for paperboard and Randall A. Ross senior vice president for cartons and containers. Newly appointed vice presidents are Frank G. Osborne, vice president and secretary-treasurer; C. Edward Lindgren, vice president for folding cartons; Theodore L. Seith, vice president for shipping containers; George L. Petersen, vice president, Cornell plant.

Owens-Illinois Glass Co., Toledo, Ohio, has started construction of a new glass container manufacturing plant in Atlanta to serve the area including Alabama, Florida, Georgia, North and South Carolina, Tennessee, Mississippi and parts of Louisiana. Scheduled for completion in the summer of 1957, it will be capable of producing about 300million glass containers annually. Plans also have been announced for construction of a multi-million-dollar bottle manufacturing plant in Cuba, at San Jose de las Lajas, 20 miles southeast of Havana. The plant will be operated by Compania de Vidrios Owens-Illinois de Cuba, S.A., a wholly owned O-I sub-

Maxson A. Eddy has been named director of packaging-a new position-



will continue as general manager of the Globe Collapsible Tube Corp., also a division of Olin Mathieson.

Walter J. A. Connor has been elected president of American Plastics Corp., New York, a subsidiary of Heyden Chemical Corp. Simon Askin, president of Heyden, has been elected chairman of American Plastics and James K. Lindsay, secretary-treasurer of Heyden, has been named treasurer. Mr. Askin previously served as president of American Plastics.

The Dow Chemical Co., Midland, Mich., plans to build a new Administrative Center in Midland. The Center will be a group of buildings in an area about a half-mile long and a quartermile wide, containing headquarters for the entire company. Ground will be broken this summer for the first units. To be built first is the Chemical Sales & Technicial Service Bldg., followed by an executive office building and a plastics

building.

Dow, in streamlining its Plastics named F. J. MacRae as assistant manager of the entire PTS group. He had been assistant manager, sharing responsibilities with E. L. Kropscott, who recently transferred to the Plastics Dept. administrative staff. Directly responsible to Mr. MacRae will be R. J. McDonald, office and supplies manager, and the managers of three field sections-E. E. Merrill, PTS-East, Allyn's Point, Conn., Div.; L. E. Tallman, PTS-West, Los Angeles; R. W. VanSickle, head of the newly established PTS-South section, Freeport, Tex. In another area, PTS-Midland has been divided into three basic groups, each under its own manager. E. E. Ziegler manages the fabricated products group which includes film, expanded plastics and sheet sections. G. W. Cheney manages the molded materials group, including molding, extrusion, and engineering and mechanical development. In this group, R. E. Monica heads up the extrusion section, which now includes calendering. Gordon B. Thayer continues as head of the molding section. D. B. Semeyn heads the new engineering and mechanical development section. P. H. Lipke has been appointed manager of the third group—testing and evaluation. In this group, W. E. Brown is responsible for the testing section and H. W. Wehr heads up the formulation section. J. A. Struthers heads the newly created special products development section.

Announcement has been made of a change in address of Dow's St. Louis sales offices, now located at 10 S. Brentwood Blvd., St. Louis 5, Mo. Dowell, Inc., a Dow subsidiary, will be located

at the same address.

The Gardner Board & Carton Co., Middletown, Ohio, has appointed Howard Baumgarten to the newly created position of director of market research.

The directors of Union Bag & Paper Corp., New York, and Camp Mfg. Co., Inc., Franklin, Va., have approved a plan to combine the two paper companies. The corporate name of the combined company would be Union Bag-Camp Paper Corp. and its four major divisions would be Union Bag & Paper Div., Union Board & Box Div., Union Chemical Div. and Camp Div. Officers of the combined company would be: chairman, Alexander Calder; vice chairman, James L. Camp, Jr.; president, Alexander Calder, Jr.; executive vice president in charge of the Camp Div., Hugh D. Camp.

National Starch Products, Inc., New York, has announced the election of



Klempner

Robert A. Bintz and Lester Klempner as assistant vice presidents. Both have men with been the company for a

number of years, Mr. Bintz having been assistant to the vice president for manufacturing and Mr. Kemper serving as manager of sales for the Eastern di-

William M. Ryan has been appointed to the newly created position of packaging industry specialist in the sales di-



That's right! Some local telephone offices are promoting colored telephones. Customers carry theirs home in H&D corrugated boxes.

Need boxes with "take home" appeal?

Call us.



# HINDE & DAUCH

Subsidiary of West Virginia Pulp and Paper Company

AUTHORITY ON PACKAGING . SANDUSKY, OHIO 13 FACTORIES . 40 SALES OFFICES



# Ultra package...for ultra tans

"Positively Prevents Sunburn for Millions" is the proud boast of Rolley, Inc. of California for its tanning cream "Sea'n' Ski".

Enriched with special emollients to guarantee this claim, "Sea'n'Ski" has a creamy consistency which does not lend itself to rigid packaging. President Charles Rolley, an authority on better merchandising techniques, completed exhaustive tests to determine a better packaging method... switched a large portion of "Sea'n' Ski" to BRACON squeeze-to-use tubes.

This added consumer convenience has helped to make "Sea 'n' Ski" the nation's largest selling tanning cream...evidence of motivating power when both product and package are outstanding.

BRACON tubes and bottles are economical, functional and appealing to the eye and touch. They do not roll up to obliterate product identity when contents are gone. Gentle squeeze action makes BRACON tubes and bottles ideal for packaging most powders, creams, and sprays. Let our laboratory analyze your product for BRACON squeeze-to-use packaging . . . no obligation. Phone or write for further details.

## BRADLEY CONTAINER CORPORATION

Maynard, Mass. - New York, Chicago, Los Angeles, Toronto

#### Plants and people

vision of the Polychemicals Dept., E. I. du Pont de Nemours & Co., Inc., Wilmington, Del. Dr. Norman A. Copeland, manager of Du Pont company's cellophane plant at Old Hickory, Tenn, has moved to Wilmington as special assistant to the director of production of the Film Dept. Charles E. Fogg, manager of the Yerkes film plant in Buffalo, is now manager of the Old Hickory plant. P. H. Gabriel, manager of the Clinton, Iowa, cellophane plant succeeds Mr. Fogg as Buffalo plant manager. Mark S. Corr, Jr., works engineer at Clinton, becomes plant manager there.

Fred E. Bell has been appointed Los Angeles district manager, Packaging



Coast sales organization of Dobeckmun are Gene Woempner, now in sales

training in the Berkeley office, and Stewart Price, now with the company's San Francisco office.

Richard C. Reed, Jr., has been appointed district sales manager of the New Orleans district of Jones & Laughlin Steel Corp.'s Container Division.

John A. Cushman has been appointed manager of the American Viscose Corp.'s plant at Marcus Hook, Pa. Installation of facilities for producing eclophane at the Marcus Hook site is now under way and will increase the corporation's annual capacity by more than 50%.

Miss Harriet Raymond, advertising manager of the Plastics Division, Celanese Corp. of America, New York,

has been elected president of the Advertising Women of New York City, Miss Raymond was named Outstanding Advertising Woman of the Year in 1945 by the Chicago Women's Advertising Club. C. H. Litz has been

Raymond

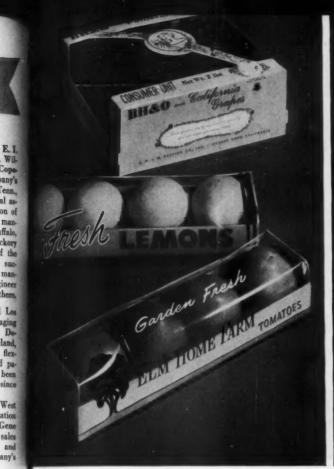
C. H. Litz has been made assistant sales director of the sheet and molding materials department, Plastics Division, Celanese Corp.

The European office of Celanese Corp. has been moved to Geneva, Switzerland, from Dusseldorf, Germany. R. J. Davis continues in charge, with offices at 17, Rue Neuve du Molard.

Federal Paper Board Co., Inc., Bogota, N. J., is planning to acquire the Morris









# "breathers" or "bagbusters"

# Celanese supplies Packaging Films for both types

#### CELANESE ACETATE FILM, the "Breathing" Film

For many types of produce and baked goods such as: tomatoes, lemons, grapes, apricots, asparagus, plums, peaches, cherries, fresh baked pies, iced pastries . . .

> Crystal Clear Waterproof Greaseproof **Mold Retardant**

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3170G

**Gas Permeable Dimensionally Stable Non-Aging Heat Sealable** 

#### CELANESE POLYETHYLENE FILM, the Tough Film

For bags and drum or carton liners for fresh foods such as: potatoes, onions, oranges, grapefruit, carrots, beets, poultry, apples, radishes . . .

> Satin Smooth **Tear Resistant** Waterproof

**Non-Brittling Taste Free** Non-Aging Flexible Even at Freezing

You can obtain these Celanese packaging films directly, or through a nation-wide group of jobber outlets. Printed, or plain and fabricated acetate and polyethylene wraps and containers are available from converters and manufacturers. Celanese Technical Service draws on twenty-five years of experience to assist you in developing a packaging program to fit your needs. Write for the new brochure "Celanese Plastic Films for packaging and other purposes." Use coupon below. Celanese Corporation of America, Plastics Division, Dept. 108-G, 290 Ferry Street, Newark 5, N. J. Canadian affiliate: Canadian Chemical Co., Limited, Montreal, Toronto and Vancouver.

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packaging films



...YOURS, free for the asking!

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☐ AND 16 MORE!

If your laminating problems involve the bonding of any films, any foils, any papers . . . to themselves or to each other . . . write, today, for this helpful "Adhesives Selector Chart" which lists recommendations for 26 different laminating materials . . . over 670 different single-laminate combinations . . . approximately 6,400 laminate/adhesive/laminate combinations . . . with their outstanding properties!

This comprehensive Chart is part of a deluxe, profusely illustrated brochure showing how BONDMASTER Adhesives have successfully solved such problems for other leading

firms in your own field. Write for your FREE copy today - without cost or obligation.



# RUBBER and ASBESTOS CORP.

233 Belleville Avenue, Bloomfield, New Jersey

## THE MOST DEPENDABLE LINE ...



THE BEST TAPE SEAL-ER OF SHIPPING CON-TAINERS, A NATURAL FOR RULE 41.

**AUTOMATICALLY TAPES 25** OR MORE CASES PER MIN-UTE, SINGLE-STRIP, TOP AND/OR BOTTOM FLAPS ONLY, PLUS END-PANELS, IF REQUIRED. "IT'S ALWAYS READY." TAPE ALSO DUST AND PILFER-PROOFS. MA-CHINE LENGTH 7 FEET, MINIMUM.

GENERAL'S ONE-MAN BOTTOM FLAP GLUER OF UNFILLED CARTONS IS "THE BEST YET." DOES MORE AND BETTER FOR LESS. ONLY 5' WIDE BY 9' LONG.

GENERAL'S CASE SEALERS HAVE ALL THE DESIGN FEATURES THAT ENGINEERED THE UNEQUALLED "GENERAL LINE" FOR TAPING OR GLUING THE "MANUFACTURERS-IN CONTAINER MANUFACTURING THROUGHOUT THE INDUSTRY. IT'S REALLY WISE TO GENERAL-IZE.

THE BEST NAME IN TAPING AND GLUING

General Corrugated Machinery Company, Inc. Palisades Park New Jersey

Paper Mills, Chicago. Both companies are in the paperboard and folding carton fields. The merger plan is subject to approval by directors and stockholders of both companies.

The Forbes Lithograph Mfg. Co. Boston, Mass., has appointed Morgan Johnson to the newly created position of technical





Mr. Johnson will continue to operate from the

service di rector, Gra-

vure Sales

Division.

Lanigan

pany's New York office, Also announced by Forber is the appointment of Vincent C. Lanigan as gravure sales manager, Mr. Lanigan will be in charge of all flexible packaging and other gravure sales and customer service. Thomas A. Lawson has joined the New York office of Forbes as sales representative.

A new, modern steel and concrete warehouse is being constructed by the Anchor Hocking Glass Corp., Lancaster, Ohio, at its Salem, N. J., glass container plant. It is expected to be ready for occupancy Aug. 1.

Consolidation of the New England sales office for Kupfer Bros. Co. and The Miami Valley Coated Paper Co. has been announced. The new offices are located at Riverdale St., Northbridge, Mass., and staffed by John Ernst and E. F. Deignan.

Chase Bag Co., Chicago, has appointed Lee S. Ralph as sales manager of its St. Louis branch. Mr. Ralph was formerly in the company's New York sales office.

Charles L. Sheldon, Sr., has been appointed special representative for the



Container Division of Robert Gair Co., Inc., manufacturer of paperboard and paper products. Mr. Sheldon director of the WPB Container Division during World War II. Also announced by Gair is the appointment of Donald J. Ball as sales manager

Sheldon

of the Middletown (Ohio) boxboard mill of the company's ACM Division.

Durethene Corp., a subsidiary of Koppers Co., Chicago, has started produc-tion in its new plant at 7000 W. 60 St., reportedly the largest in the world devoted exclusively to the manufacture of polyethylene film. Koppers has also announced the purchase of a 176-acre tract



PROTECT ON AND APPEARANCE!

R.O. Seals have it box ways. They are practical, giving a perfect hermetic seal. They we handsome, with their colourful designs and superb finish. Even seal is tailor-made to suit the individual bottle or jar screw the ad rolled by the R.O. sealing machine. Made in three types—with Plain skirt, with Pilferproof perforated security band or with the new SecuRo contra-thread security band. Whichever type you need for your containers, you can be sure that

the R.O. is the most distinctive closure for any product.

ENGLAND

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Write now for complete information

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Manufacturers of Plas-Tie bag closures and Fas-Tie paper "twists"

# Plants and people

of land near Monroeville, Pa., as the site for a new multi-million-dollar research center, which is expected to triple the company's research program within the next 10 years. Transfer of facilities from the Verona, Pa., research center will be gradual over the next four years to prevent interruption to a continuing research program.

Lippincott and Margulies, New York industrial design organization, has an-







Schoelles

promotion of Albro F. D o w n e from assistant director to director of its package design department. Former di-

nounced the

rector, Norman A. Schoelles, has been appointed vice president in charge of package planning.

Container Research Corp., Westport, Conn., has established plastic molding and forming facilities at Manlius, N. Y., to provide integrated container development and manufacture.

Bert G. Hefter, vice president and general sales manager for Milprint, Inc., Milwaukee, Wis., has been appointed to the company's board of directors. William W. Dazey has been named to the Milprint sales staff.

The Pfaudler Co., Rochester, N. Y., has announced the formation of a new company to manufacture brewhouse equipment in Australia. To be known as Schock Gusmer & Co. (Australasia) Pty., Ltd., it will be jointly owned by Pfaudler and Mauri Bros. & Thomson, Ltd., of Sydney, Australia. The same line of brewery equipment manufactured by Pfaudler's Schock Gusmer Div. will be produced by the new firm.

Six new district offices have been opened by the plastics sales division of Phillips Chemical Co., wholly owned subsidiary of Phillips Petroleum Co., Bartlesville, Okla., for marketing its new Marlex polyethylenes: Pasadena, Calif., under the management of R. G. Askew; Elmhurst (Chicago), Ill., J. T. Roach, district sales manager; New York, W. C. Douce, district sales manager; Akron, Ohio, W. M. Larsen, manager; Providence, R. I., C. R. Scott, manager; Bartlesville, R. F. Uber, manager of southern district and foreign sales.

The Wabash Fibre Box Co.'s new Chicago plant at 6850 W. 62 St., was officially opened recently. The plant will increase the firm's total corrugated box production by 480,000,000 sq. ft. a year.

The Gibraltar Corrugated Paper Co., Inc., Clifton, N. J., has purchased an eight-story building in Jersey City, N. J., to house its Display Division. The move to its new quarters is expected to be completed by Sept. 1.

Conapac Corp. has appointed H. L. Reitzes as sales representative for the West Coast to handle the Roto Bag, Holweg, Roto Wrap and Walgan lines of packaging equipment.

The New York sales offices of Hazel-Atlas Glass Co., Wheeling, W. Va., are now located in new, larger quarters at 415 Madison Ave., at 48 St.

Crown Zellerbach Corp., San Francisco, has announced a series of six management changes in its expanded Waxed Paper Div., San Leandro. David Benjamin, former president of Waxide Paper Co. which was purchased by Crown Zellerbach last January, has been named assistant general manager of the division. George Donald, manager of the Portland plant, becomes general sales manager at San Leandro. Moss Barr, sales manager at San Leandro, becomes resident manager in Portland. Bud Launtz, former Portland superintendent, becomes assistant to the manager in Portland. Ernest A. Mitchell has been transferred from Kansas City to San Leandro as staff manager. Shell Taylor has been promoted from salesman to sales manager at San Leandro.

A. W. Peters has been appointed Central Division (Flex-Vac) sales manager by the Standard Packaging Corp., New York. Eugene Trandel has been named assistant manager.



Yocum

Winston W. Yoeum, formerly with the Flex-Vac Division of Standard Packaging Corp., has been named general sales manager of Packers Package, Inc., Muncie, Ind. Mr. Yoeum will be responsible for the development and promotion of all products made by

the firm, a newcomer in the field of lithographed meat backer boards and folding cartons.

Robert C. Burke has been appointed sales representative for the Eastern district, J. M. Huber Corp.'s Ink Division, Hillside, N. J. His territory covers New York State, New Jersey and Western Pennsylvania, as well as Metropolitan New York.

St. Regis Paper Co., New York, has announced the election of Folke Becker, chairman of the board of Rhinelander Paper Co., as a director of St. Regis to fill the vacancy created by the re-



.Thanks to ingenuity-and

**Kodapak Sheet** 

First, it's a showcase . . . shows the merchandise is an automotive tune-up kit . . . shows what condition it is in . . . shows everything's there.

> Second, it's a work tray. The customer detaches the transparent cover, uses it to hold parts while installing kit. The card itself gives full installation instructions.

Last (and of great importance), the unit is .030 Kodapak Sheet. That means it's tough, durable, crystal-clear . . . makes original use and re-use possible.

It means, too, that the case was easily and economically formed in a single operation.

Like to tune-up your merchandising? Then check in on Kodapak Sheet. It comes in various formulations, gauges and widths—cast and extruded. For full details call in our representative or write for literature together with names of firms using Kodapak Sheet or handling it.

> **Cellulose Products Division EASTMAN KODAK COMPANY** Rochester 4, N.Y.

Sales Offices: New York, Chicago, Atlanta. Sales Representatives: Cleveland, Philadelphia, Provi-

dence. Distributors: San Francisco, Los Angeles, Portland, Seattle (Wilson & Geo. Meyer & Co.); Toronto, Montreal (Paper Sales, Ltd.).

MAKES GOOD MERCHANDISE













HEAVY ... FOR THE HEFT AND FEEL OF A HEAVIER RAZOR



CLEAN

REFRESHING

BRISK







J. L. CLARK Lithographed Metal Containers

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St. R
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# Plants and people

tirement of Carl B. Martin. Rhinelander is now operating under the same management as a subsidiary of St. Regis. Announcement has also been made that the Pacific Waxed Paper Co., Seattle, Wash., manufacturer of food-packaging materials, has become a wholly owned subsidiary of St. Regis. Present management and personnel of Pacific Waxed Paper will continue unchanged.

The West Carrollton Parchment Co., West Carrollton, Ohio, founded by A. H. Friend in 1896, is celebrating this year its 60th anniversary as a manufacturer of vegetable parchment for the food



packaging industry. The company, stategically located to serve the Midwest dairy and food industries, counts many of the country's leading food manufacturers among its customers. A special Anniversary Emblem designed to commemorate its 60th anniversary (see photo above) is being reproduced on all mail sent to the firm's customers. Present officers of West Carrollton Parchment are Miles E. Moyer, chairman of the board; Leonard Huffman, president; W. E. McGinnis, vice president, and Ralph E. Shoemaker, secretary.

Clay Willingham, formerly in charge of Midwest sales for the U. S. Automatic Box Machinery Co., Inc., Boston, has rejoined the firm's sales organization. He will be based at Springfield, Mo.

Einson-Freeman Co., Inc., Long Island City, N. Y., won 12 of the 42 store display awards presented by the Lithographers National Assn. in its 1956 Awards Competition. All award-winning material was displayed by LNA in New York June 4-8 at the Hotel Madisses.

Ground has been broken at Santa Clara, Calif., for a new Container Corp. of America boxboard mill and storage warehouse. The unit will be a new addition to the Chicago company's California Container Corp. division. Scheduled to other operations in July of next year, the new mill will have a top daily production of 150 tons.

The Cryovae Co., Div. of W. R. Grace & Co., Cambridge, Mass., has been given the second annual award presented to a New England concern by the Boston Chapter of the American



Consistently Good!



Plants and people

Marketing Assn. for outstanding achievement in the field of marketing.



Sharp

T. W. Sharp has been appointed manager of the Industrial Products Dept. for the Bakelite Co., a Division of Union Carbide & Carbon Corp., New York. He will be responsible for sales of both the Flexible Packaging Materials Division and the Surface

Sharp vision and the Surface Coatings Div. Mr. Sharp succeeds Howard Smith, who has been named assistant general sales manager.

Plans for a new aluminum foil plant at Torrance, Calif., have been completed by Reynolds Metals Co., Louisville, Ky. The new plant, 15 miles south of Los Angeles, will produce foil up to 60 in. wide and converted products up to 54 in. wide. The plant is expected to be operating by the end of this year.

Harold Van Doren, industrial designer, has moved to new and larger quarters at 1717 Sansom St., Philadelphia 3, Pa.

Kerm Eisenlohr has been appointed a sales representative in the Seattle, Wash., office of the H. S. Crocker Co., Inc., San Bruno, Calif., lithographing

A new firm, Quality Tools Corp., 108 Nassau Rd., Roosevelt, Long Island, N. Y., has been set up to manufacture models and molds for use in the vacuum forming of plastic sheet materials. Its president is Sanford S. Zimmerman, who is chairman of the machinery section of the Sheet-Forming Div., The Society of the Plastics Industry.

Ed Chrostowski has been appointed manager of Eastern dealer sales for Weber Marking Systems, a division of Weber Addressing Machine Co., Inc., Mt. Prospect, Ill.

Crown Cork & Seal Co., Inc., Philadelphia, has named James F. O'Neill as sales representative for its can division in the New York district.

The Enameloid Sign & Display Co., Inc., Reading, Pa., has appointed Lyn Hensevelt as production manager in charge of its silk-screen process division.

Walter C. Beard, Jr., has been appointed to the newly created post of director of research for the Risdon Mfg. Co., Naugatuck, Conn.

David S. Tillotson and Peter Pawlyk have joined the staff of the Pennsylvania Salt Mfg. Co.'s Technical Division and have been assigned to its alesservice department. Both will specialize in the technical applications of



# "D-MOUNT" interchangeable RUBBER PLATE SLEEVES

Pat. Pending

• If you want to save time and money—and still maintain or improve your printing quality—MOSSTYPE'S proven "D-MOUNT" Rubber Plate Sleeves are your answer.

"D-MOUNT" Sleeves are shaftless slip-on printing cylinders made of feather-weight alloy metal...specially designed for interchangeable assembly on a universal steel "D-MOUNT" Mandrel. Precision-sure "D-MOUNT" principle enables you to shrink-fit sleeve and mandrel together in a rigid grip...yet disassemble them in minutes after the run. Mandrel centers itself in bore of sleeve in exactly the same true position every time...assuring precision accuracy and concentricity.

MOSSTYPE "D-MOUNT" Sleeves cost only a fraction of what you pay for good shafted plate cylinders...yet they give you all the extra advantages of maximum precision, lighter weight, easier handling and storage. Also available with plates mounted in position ... or with vulcanized all-over designs.

Thousands of "D-MOUNT"
Sleeves in use...3 years
of successful performance





Write for illustrated "D-MOUNT" bulletin and price list

# MOSSTYPE

150 Franklin Turnpike, Waldwick, N. J.

A complete production service for converters and package printers everywhere

# Seals-Labels-Tags by CAMEO





# Plants and people

Pennsalt's new Isotron aerosol propellents and refrigerants which will be produced in a new organic fluorine plant to be completed late this year at Calvert City, Ky.

Richard K. Sprague has joined the United Shoe Machinery Corp., Boston,



Sprague

Mass., to handle sales of the Boxmaster cartonforming machine which the firm's Industrial Sales Div. will distribute in all markets except the shoe industry. Mr. Sprague jointed Hoague-Sprague Corp., United's affiliate which originally developed the

Boxmaster, in 1935. Hoague-Sprague will continue to distribute the carton former to the shoe industry.

Edward T. Creighton has been appointed by the Wood Conversion Co., St. Paul, Minn., as industrial products salesman in the Hartford, New York territory.

Jean C. Loeffler has been appointed treasurer of the Exeter Paper Co., Inc., Chicago. L. W. Hedstrom has been elected as secretary of the firm.

A change in corporate name from Carton Label & Lithograph Co. to Security Lithograph Co., Label Division, has been announced. This San Francisco lithographing firm, in business for almost 50 years, feels that the new name more accurately describes its services.

The United States Printing & Lithograph Co., Cincinnati, Ohio, received 18 awards in the recent 6th Annual National Lithograph Competition of the Lithographers National Assn.

Borg Hanson has been appointed frozen-foods packaging sales representative in the Chicago area for Marathon Corp., Menasha, Wis.

Monroe-Danford & Co., Lincoln Park, N. J., manufacturers' sales representative, has been organized by Donald M. Shaw and Maxwell D. Smart to supply packaging items to the cosmetic, drug, pharmaceutical and related industries. Mr. Shaw was formerly with the Richford Corp. and Mr. Smart had been with M. W. Parsons-Plymouth, Inc. Companies represented by the new firm include Metal Fabrications, Inc., and Seri-Print, Inc., both of Waterbury, Conn., and Federal Powder Puff Co., New York.

The National Container Corp., New York, has acquired cutting rights to all timber held by the British Crown on the islands of Grand Bahama and Abaco in the Bahamas, thus adding approximately 300,000 acres to its timber reserves. The company has also been granted a license to do business in Freeport which has been established on Grand Bahama under a special act of the island legislature.

Old Empire, Inc., Newark, N. J., contract packagers, have announced the following appointments: Hans W. Maucher, sales manager; Robert A. Ehrlich, sales representative, and Dr. Paul Schmitt, director of research and development in a consulting capacity. The firm recently acquired a 20,000-sq.-ft. building at 212 Sylvan Ave. in Newark.

Doughboy Industries, Inc., New Richmond, Wis., has named Dale Hostvet as advertising manager, a new position. Mr. Hostvet was formerly a member of the company's public relations staff. From the company's home office, he will work with the heads of each division on a new advertising and sales promotion program marking the 100th anniversary of the company.

Plans have been completed for a new \$500,000 plant for Mullery Paper Packages, Inc., St. Paul, Minn. The new 75,000-sq.-ft. building will be located at 1050 N. Kent St.

Robert J. Pierson, Jr., is the new national advertising and sales promotion manager of the Container Div. of Rheem Mfg. Co., Chicago. He replaces B. Edward Soby, who has resigned to start his own business in San Francisco.

Wilhelm B. Bronander, Sr., president of the Scandia Mfg. Co., North Arlington, N. J., died on May 18 at the age of 68. A machinery inventor who held some 200 patents, Mr. Bronander was best known for his development of packaging machinery for cigarettes and cigars. Born in Sweden, Mr. Bronander came to the United States in 1907 and was associated with the American Machine & Foundry Co. before founding the Scandia company in 1918.

Lawrence J. Engel, chairman of the executive committee and one of the partner owners of Einson-Freeman Co., Inc., display lithographers, Long Island City, N. Y., died suddenly of a heart attack on May 24.

Prof. Emmy Zweybrueck, industrial and package designer and educator, died on June 10 at her home in New York after a brief illness. Born in Vienna, Prof. Zweybrueck divided her time between the United States and Europe for many years. She was art director for the American Crayon Co. and on the faculty of the University of Southern California.



#### PAR-PAK BAGS ARE TOUGHER!

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Made from only the best films available, to avoid rupturing. PAR-PAK bags will withstand any normal strength test.

#### PAR-PAK BAGS ARE SEALED TIGHT!

We take extra time and use special effort to produce bags with siftproof and leakproof seals. They're really sealed!

#### PAR-PAK GUARANTEES THICKNESS!

There's no sacrificing of thickness-for-cost at PAR-PAK! Thicknesses are guaranteed, within standard tolerances.

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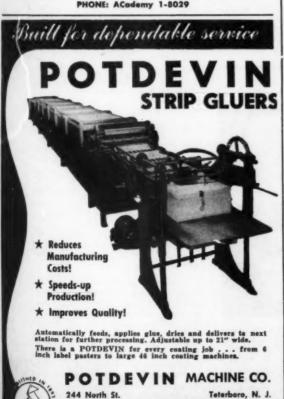
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# For your information



Anchor Hocking Glass Corp., has been elected president of the Glass Container Mfrs. Institute, Inc. Edmund F. Ball, president of Ball Bros. Co., Inc., was elected as vice president. New officers were elected

S. B. DeMerell, vice

president and director of

DeMerell New officers were elected at the Institute's recent 12th annual meeting.

Directors of the Packaging Institute have approved the establishment of two Annual Packaging Institute Awards for outstanding contributions to packaging: a PI Corporate Award intended to recognize the corporation which has integrated new packaging materials, machinery, designs or techniques on a commercially productive basis and a PI Individual Award intended to recognize the individual who has developed new packaging materials, machinery, designs or techniques. An Awards Committee will select seven impartial jurors of national reputation and stature who will make the selections. Details will be announced at the annual Awards Presentation dinner, Sept. 10, in Cleveland, at the 18th Annual Packaging Institute Forum.

At the recent meeting of The Fibre Drum Mfrs. Assn. in Rochester, N. Y., considerable attention was devoted to plans for improving standard testing procedures and industry weight classifications. The following officers were elected: president, H. H. Filler of Rheem Mfg. Co.; vice president, W. D. Cox of Fibre Drum Co.; secretary-treasurer, R. F. Gumbert of Plyfiber Container Corp. Glenn Mather continues as managing director. A midyear meeting was scheduled for October in Milwaukee and the 1957 annual meeting was set for May 2-3, at the Hotel Commodore, New York.

At the recent annual meeting of the National Fibre Can & Tube Assn., James C. Baxter of the J. C. Baxter Co. was elected association president, succeeding Arno P. Niemand of Niemand Bros., Inc. Also elected were: W. F. J. Fienup of R. C. Can Co. as vice president; James B. Platt, Jr., of Stone Paper Tube Co., treasurer, and Paul S. Hanway, managing director. The program included consideration of surveys by Battelle Memorial Institute and new products developments by C. A. Southwick, Jr., technical editor of Modern Packaging and packaging engineer consultant; D. G. Magill, packaging engineer consultant, and others.

The National Education Committee of the Society of Industrial Packaging & Materials Handling Engineers has announced a series of Technical Achievement Awards for its members as a complement to the annual National Protective Packaging & Materials Handling Competition. Awards will be given to the authors of the best technical papers submitted in the fields of materials handling, packaging, and combined packaging and materials handling. Papers may be submitted only by SIPMHE members, either individually or in groups. Papers will be judged by the college faculty members of the SIPMHE National Education Committee, with John W. Kraus of Thompson Products, Inc., serving as chairman. Papers must represent original work and announcement of the winners will be made during the annual Technical Short Course presented in conjunction with the 11th annual Protective Packaging & Materials Handling Exposition and Competition, to be held in St. Louis, Oct. 22-25. W. Vernon Swofford of Sefton Fiber Can Co. is general chairman of the Exposition and Elmer A. Kruse of Wagner Electric Corp. is chairman of the planning committee for the Short Course. Wilmer J. Balster of Don L. Quinn Co, is chairman of the competition.

The 1956 Memorial Award of the Chemical Market Research Assn. has been presented to Albert E. Forster, board chairman, president and a director of Hercules Powder Co., for his contributions to market research in chemistry.

The publication of Military Specification MIL-B-3959, titled "Barrier Material for Moderately Water-Vaporproof Interior Packaging Bags," has been announced by the Dept. of Defense in Washington. Type designations—heavy, medium and light duty—are included in this new specification, which covers material intended for the fabrication of Class "d" interior packaging bags covered by Military Specification MIL-B-117. It is intended that a Qualified Products List be published in connection with this new specification.

Agreement to pool and distribute research information at all levels of the food industry in an effort to help solve packaging problems was reached at an organizational meeting of the Inter-Industry Food Packaging Committee, held recently in Cleveland during the Super Market Institute convention. Discussions centered around the need to explore further the problems of (1) uniform location of price markers, (2) standardization and simplification of package sizes and (3) unit packaging for shipping containers. Improved package construction, particularly for frozen

#### Another cover award for MODERN PACKAGING

For the second consecutive year, a Walter Allner cover design has won for Modern Packaging the Award of Distinctive Merit of the Art Directors Club of New York.

The October, 1955, cover—one of a three-year series characterizing leading packaging-using industries—was one of two Distinctive Merit awards this year in the trade-magazine category, the other going to Compendia Medica. The MODERN PACKAGING cover was among 514 examples of editorial and advertising art selected from the 11,388 entries in the competition for exhibition in the New York Art Directors' Club show at the Waldorf-Astoria, June 4-8. Winners will be exhibited elsewhere in the U. S. and abroad, and will be reproduced in the forthcoming 35th Art Directors Annual to be published this fall. The latest



citation represents the fourth time that Modern Packaging has received recognition for its current Industry Survey series of cover stories. Earlier awards include the Art Directors Award of Distinctive Merit to Mr. Allner for the February, 1955, cover symbolizing canned foods, the Certificate of Editorial Excellence for the 1954 series of cover illustrations and articles, presented in Industrial Marketing, and the Certificate of Distinctive Merit from the Art Directors Club of Philadelphia, presented in November, 1955, to Donald R. Ruther, art director of Modern Packaging, and George Guisti, designer, for the January, 1954, cover illustration launching the Industry Survey series.

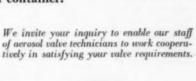
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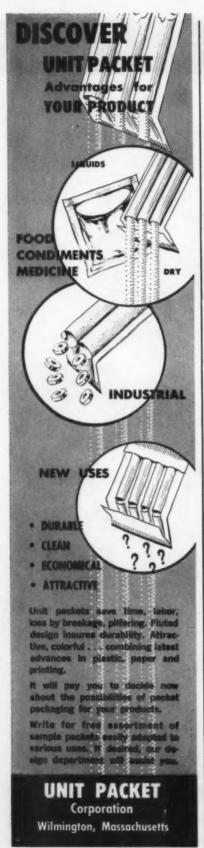
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# For your Information

foods; cooperation between package suppliers and buyers, and uniform State weighing regulations were also cited as problems for future consideration. Committee chairman is Merrill Maughan of the Folding Paper Box Assn.

The Waxed Paper Institute and Waxed Paper Merchandising Council have announced the following



newly elected leaders and major appointments: chairman of the board of directors of the Institute —Robert Halford of Fabricon Products; vice chairman — George Cadotte of Central Waxed Paper Co. William Mason of Nashua Corp.

will head the expanded statistical program and a newly elected member to this committee is Pierson Grieve of Rapinwax Paper Co. James Conley of Fraser Paper, Ltd., was elected to the board of directors of the Waxed Paper Merchandising Council.

The National Paper Box Suppliers Assn. has elected Carl A. Beck, Charles Beck Machine Co., president and Ludwig P. Raubenheimer of Peter Partition Corp. as vice president.

S. Chester Markley, who recently retired after 37 years as president of the Comas Machinery Co., has been elected to honorary life membership in the Packaging Machinery Mfrs. Institute. The award honored his meritorious and distinugished service to the Institute.

Walter P. Paepcke, chairman of the board of Container Corp. of America, has been named to represent the paper and packaging industries on the National Advisory Council for the national industrial exposition of new industrial products, methods and research developments to be held in October at the Detroit Artillery Armory.

The program of the 1956 annual conference of The Society of the Plastics Industry, Inc., held last month in conjunction with the Seventh National Plastics Exposition, included a packaging session featuring talks on film, rigid plastics, protective coatings, a report on FDA legislation and a session on packaging design.

Closing date for entries in the First National Flexible Packaging Competition has been set for July 16. The event, sponsored by the National Flexible Packaging Assn., will have 16 classifications set up, including converted packaging forms of glassine, films and foils. Six top-rated packages in each class will be exhibited the Packaging Machinery & Materials Exposition in Cleveland,

Sept. 11-14. Final awards will be presented at the NFPA fall meeting, Oct, 1-3, at the White Face Inn, Lake Placid, N. Y. All entries should be sent to: 1956 National Flexible Packaging Competition, c/o Paper, Film and Foil Converter, 200 S. Prospect Ave., Park Ridge, Ill.

Carl N. Reed, Niagara Lithograph Co., has been elected president of the Lithographers National Assn. He succeeds Carl R. Sehmidt, Schmidt Lithographing Co., who was named chairman of the board. Other LNA officers elected are John M. Wolff, Jr., Western Printing & Lithographing Co., vice president, and William M. Winship of Brett Lithographing Co., treasurer. New directors are Ralph J. Wrenn, Stecher-Traung Lithograph Corp.; Milton E. Kingsley, The Providence Lithograph Co., and Malcom G. Pittman of the Greiner-Fifield Lithographing Co.

Pierre Harang of Houbigant Sales Corp. has been elected president of The Toilet Goods Assn. and J. I. Poses of D'Orsay Sales Corp. has been named vice president. New directors are John W. Cawley, The George W. Luft Co., Inc.; Carl W. Gardiner, Elizabeth Arden Sales Corp.; D. H. Williams of Sterling Drug, Inc.

The 4th International Packaging Exhibition, to be held next year in Amsterdam, Holland, has been scheduled for the week of May 14-21. The Dutch Packaging Exhibition, held every two years, has grown in size and importance since its inauguration in 1951. Some 350 exhibitors are expected to display their products. For information on the event, write to N. V. 't Raedthuys, Tessel-schadestreat 5, Amsterdam, Holland.

A 38-page booklet on the properties, types and printing techniques for rotogravure inks, offered by the Champlain Co., is based on a report compiled by the Packaging Technical Committee of the Gravure Technical Assn. Illustrations include a sample form for maintaining a record of different inks used for different printing jobs and a typical gravure cylinder production order form. Included is a glossary of gravure-ink terms. Requests for copies of "Rotogravure Ink" should be sent on company letterhead to Champlain Co., 88 Llewellyn Ave., Bloomfield, N. J.

#### What's doing

July 10-12—Sixth Western Packaging & Materials Handling Exposition, Pan Pacific Auditorium, Los Angeles. July 29-Aug. 9—Chicago Gift Show, Eastern Mfrs. & Importers Exhibit, Inc., Chicago.



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FRUIT PIE PANS — Stronger construction, smoother rims, variety of gauges of foil. Top-in, bottom ratios, vertical depth and other volumetric patterns to adjust pie conformation and scaling weight relationship. For fresh or frozen fruit pies.

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# U.S. patents digest

This digest includes each month the more important patents of interest to those who are concerned with packaging materials. Copies of patents are available from the U. S. Patent Office, Washington, at 25 cents each in currency, money order or certified check; postage stamps not accepted. Edited by H. A. Levey.

Method of and Apparatus for the High-Speed Packaging of Filamentary or Strand-Like Materials, G. Slayter and M. C. Anderson (to Owens-Corning Fiberglas Corp., Toledo, Ohio). U.S. 2,741,009, April 10. A method for the packaging of continuous filamentary or strand-like material produced at a high linear speed that comprises the steps of projecting the material linearly across an open space toward a packaging station at such speed that material arrives at such station with an impetus greater than that achieved under free fall and positioning a voraminous container across the line of movement of material at such station for receiving and containing the strand.

Apparatus for Making Paper Boxes, C. Straw (to Henry Russell Davis, Jr., South Lincoln, Mass.). U.S. 2,741,167, April 10. Box-making apparatus including in combination a machine for setting up and staying paper boxes, means for applying adhesive material to box wrapper, mechanism for wrapping wrappers about set-up boxes, means for feeding wrappers from such adhesive-applying means to wrapping mechanism.

Container for Packaging and Inflating Pneumatic Articles, E. D. Harrowe (to Ideal Toy Corp., Hollis, N.Y.). U.S. 2,741,360, April 10. In a variable-size packaging device, a container comprising a pair of telescopic members of substantially equal length, members having distal ends closed and proximal ends open to form a telescopic chamber.

Shipping Container for Glass, S. E. Cortright (to General Motors Corp.). U.S. 2,741,362, April 10. A container, a packing strip to encircle the marginal edge of an article within container and to abut opposite sides and ends and top and bottom of container, said packing strip comprising a single length of material embodying three separately formed and joined-together layers.

Closures, O. Rubin, Bronx, New York. U.S. 2,741,388, April 10. A closure for a container having an open end, closure comprising a soft, flexible seal having a flat body adapted to overlie transversely and close off container's open end.

Machine for Labeling Cylindrical Articles, S. T. Carter (to Geo. J. Meyer, Mfg. Co., Cudahy, Wis.). U.S. 2,741,389, April 10. In a labeling machine, means operative to move a series of articles to be labeled one by one along a predetermined path, a plurality of magazines for labels and means operative first to remove a label from one magazine and then to remove a label from another magazine in alternation.

Tear-Strip Guides, W. C. Rath, Marion, Ind. U.S. 2,741,394, April 10. In a tear-strip guide, a substantially flat longitu-

dinally curved body, a pair of spaced arms projecting from the forward end of body, arms having spaced parallel inner edges disposed equidistant from longitudinal axis of body with space between to straddle tear strip.

Containers and Closures Therefor, F. Lobl (to Faultless Rubber Co., Ashland, Ohio). U.S. 2,741,396, April 10. A container comprising a substantially rigid wall portion having a fill opening therein, a removable and replaceable closure for opening, comprising a suction cup made of resilient material having a concave side pressed into suction engagement with exterior surface of wall portion around said opening, a plug projecting axially from said opening, resilient means at end of plug annularly engaged to back of wall portion.

Container With Cover Locking Handles, H. Riener (to American Can Co., New York, N.Y.). U.S. 2,741,398, April 10. A handle for a container having a removable slip-type cover, said cover having a depending skirt telescoping upper outer edge of container and an inclined wall integral with skirt and extending inwardly and downwardly from its upper edge at an acute angle, forming with skirt an upper marginal cover V-shape in cross-section.

Bottle Carrier, E. L. Arneson (to Morris Paper Mills, Chicago, Ill.). U.S. 2,741,399, April 10. A collapsible paperboard carrier for bottles and like articles, comprising opposed pairs of side and end walls having bottom-forming panels integrally hinged thereto.

Box Having Dispensing Means, E. T. Pringle, Jr., Brooklyn, N.Y. U.S. 2, 741,413, April 10. In a fibrous box having front and rear walls, opposite side walls and a bottom wall, an inner top wall integral with rear wall, opposed flanges integral with side walls and overlying inner top wall, rectangular valve plate slidable between flanges.

Corrugated Board Container With Interlocking Flaps, C. J. Meitzen, Wauwatosa, Wis. U.S. 2,741,415, April 10. A carton blank comprising bottom and side-wall panels in hinged connection, first end-wall panels connected to opposite ends of bottom panel, second and third wall panels connected to opposite ends of respective side-wall panels and lying laterally adjacent first end-wall panels at opposite sides thereof.

Container, G. W. Hileman (to Morris Paper Mills, Chicago, Ill.). U.S. 2,741,416, April 10. A collapsible container of polyhedral wall outline comprising, in erected condition, a plurality of rectangular side-wall panels integrally connected to one another by vertically extending creases, panels being secured together in a continuous tubular form.

Collapsible Partitions for Cartons and the Like, R. T. Rossum (to Continental Folding Paper Box Co., Inc., Ridgefield, N.J.). U.S. 2,741,417, April 10. A partition structure for installation in a box or carton; comprising a pair of quadrilateral members formed from a single piece of cardboard sheet stock, said members being spaced laterally apart by a distance substantially equal to one-half of the lateral dimensions of each of said members and including integral parts spanning one end of the space therebetween to join said members to each other.

Paperboard Carton, R. E. Van Rosen (to Robert Gair Co., Inc., New York, N.Y.). U.S. 2,741,418, April 10. A hinged-cover box of paperboard and the like comprising bottom and cover sections which telescope into one another with a wall of one section in close overlapping relation to a complementary wall of the other section when closed.

Box and Clip Construction, F. Janz (to National Container Corp., New York, N.Y.). U.S. 2,741,419, April 10. In a box comprising a bottom wall, a side wall and a reinforcing wall along side wall and unsecured to box at the bottom edge thereof, the improvement which comprises a pair of registering flaps in side and reinforcing walls, which, when bent out, define registering apertures through said walls.

Machine for Making Bags, Envelopes or Similar Containers, P. H. Diffenbaugh (to Frank Hamachek Machine Co., Kewaunee, Wis.). U.S. 2,741,956, April 17. A bag-making machine including a frame, an elongate forming mandrel carried by frame, means for feeding an elongated continuous strip of sheet heat-sealable bag material longitudinally of mandrel, folder means for infolding the opposite edge portion of sheet of bag material around mandrel to overlap centrally and a rotatable heat-sealing member engaging overlapped edges of sheet of bag material for sealing.

Carton-Erecting Machines, R. G. Haas (to Sutherland Paper Co., Kalamazoo, Mich.). U.S. 2,741,957, April 17. A machine for erecting tray-like cartons with double side walls from blanks having two opposite side portions folded double, with the inturned flaps secured along their inner edges to bottom portion of blank and scored to form collapsed parallelograms.

Cup-Forming Machine, E. W. Bridge, Sr., Philadelphia, Pa.). U.S. 2,741,958, April 17. In a machine for forming paper cups from blanks, a rotatable horizontally disposed supporting member, means for rotating supporting member in a step-by-step relation for the positioning thereof at a plurality of

# ARKEITE

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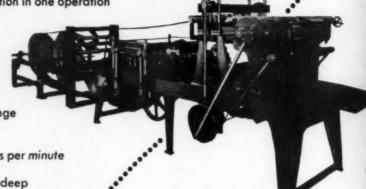




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# U. S. patents digest

stations, a slidably mounted head vertically movable with stations, a slidably mounted head vertically movable with respect to supporting member, a plurality of paper-holding members carried by supporting member for engagement with the central portion of a blank.

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Method and Apparatus for Making Bags, W. S. Cloud, Wilmette, Ill. U.S. 2,742,080, April 17. Apparatus for forming a heat-sealed tube of plastic sheet material including means for advancing two layers of plastic sheet material in a face-to-face relation, rotatable heat-sealing means positioned to contact one face of the layers along a line extending longitudinally of the layers while they are being advanced and means for laminating another layer to said face.

Object Carrier for Wrapping Machine, C. Ouellette (to Wrap-King Corp., Holyoke, Mass.). U.S. 2,742,141, April 17. Wrapping-machine apparatus for receiving, gripping and releasing objects, comprising a support, a cam rotatable on a vertical axis relative to support and having a peripheral cam edge, and a plurality of posts extending vertically upwardly from and spaced equidistant peripherally of support, and a plurality of pairs of pocket-forming members having outer ends arranged for gripping object in closed position and for receiving and releasing objects in open position and having inner ends journalled on said posts.

Shipping Package and Container for Sheet Materials, R. E. Blackburn and A. J. Heitz (to Container Corp. of America, Chicago, Ill.). U.S. 2,742,145, April 17. In a shipping package, a container comprising a substantially retangular bottom closure panel, an open top substantially rectangular frame formed of rails parallel with the sides of panel and secured to upper face thereof with their outer faces flush with panel edges.

Carrier Cartons, R. J. Hickin and C. L. Champlin (to Ohio Boxboard Co., Rittman, Ohio). U.S. 2,742,182, April 17. In a carrier carton, a body including a pair of similar side-wall members and a pair of similar end-wall members all in interconnected relation and adapted to provide a rectangular carton body and defined from each other by folding scores providing four corners of body.

Containers, L. J. Sullivan (to Nicholas Edward Griffin, South Pasadena, Calif.). U.S. 2,742,218, April 17. In a container open at the top and having a flexible side wall, the combination which comprises a pair of ears formed integrally in the side wall near but below its top and disposed symmetrically with respect to each other on opposite sides of a fold line extending along the wall transverse to the bottom, leaving the portion of the wall above the ears adjacent the fold line as a handle while rest of top of container is distended and open.

Folding Carton, R. J. Hickin, (to The Ohio Boxboard Co., Rittman, Ohio). U.S. 2,742,221, April 17. In a carton comprising a plurality of walls relatively foldable to tray form, a bottom wall, an end-wall element defined from bottom wall by a first folding score and foldable upon such score substantially normal to bottom wall.

Feed Mechanism for Carton-Forming Machines and the Like, W. deBack (to Food Machinery & Chemical Corp., San Jose, Calif. U.S. 2,742,285, April 17. Mechanism for individually feeding from a stack carton blanks having liner blanks attached thereto, said mechanism comprising means adapted to support from below a substantially vertical stack of such carton blanks with their attached liner blanks uppermost while part of lowermost carton blank extends beyond support means.

Automatic Partition-Strip Nesting Machine, S. E. Schroeder (to Clinton Foods, Inc., New York, N.Y.). U.S. 2,742,827, April 24. In an automatic partition-strip nesting machine, partition-strip nesting mechanism comprising means for receiving and holding one set of parallel partition strips including a plurality of pairs of retractable fingers which receive the strips, fingers being cyclically retractable for removal of a nested partition assembly.

Tape Feeding, Printing and Tag-Attaching Machine, P. N. Braun, Syracuse, N.Y. U.S. 2,742,828, April 24. In a tag printing and attaching machine, a main frame, a set of type wheels mounted on a horizontal axis in the frame and independently settable to set selected type at a transverse printing line, means to feed an ink ribbon over the type of the printing line, and means for feeding a tape over the ink ribbon at the printing line in a straight run of tape from one lateral side of the type wheels to beyond the other lateral side.

Article Supporting and Containing Cartons, M. I. Williamson and H. A. Carruth, (to Federal Paper Board Co., Inc., Bogota, N.J.). U.S. 2,743,009, April 24. An article suspending and containing carton formed from a single blank of paperboard material, said carton including a box part designed to contain the article therein and presenting a bottom panel, opposite side panels and opposite plural-ply end walls, and an article suspending flap forming a part of one of end walls operative to engage and suspend the article in box.

Interior Collar Tearing-Strip Container With Reclosure Holding Means, N. J. Andersen (to American Can Co., New York, N.Y.). U.S. 2,743,033, April 24. A tearing-strip container, comprising a body having an end member secured thereto in an end seam, spaced score lines extending around said body to define a removable tearing strip for severing upper portion including end member used as a reclosure.

Carton Setting-Up Machine, W. H. Wilcox (to Fibreboard Products, Inc., San Francisco, Calif.) U.S. 2,743,651, May 1. A machine for setting up a

M

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printing variables on bakery labels

... demanded tremendous variety in imprints, rapid changing to meet demand, price, ingredient changes. Imprinting variables on roll stock labels with a Markem 88A machine has now eliminated obsolescence, shortages, purchasing headaches — resulted in sizable total dollar savings.

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pressure-sensitive tape purchased outside forced manufacturer to carry several types with various printings, delay shipment when proper kind was not on hand. Using a Markem 25A machine, he reports savings of at least 75%, no delays or inventory problems.

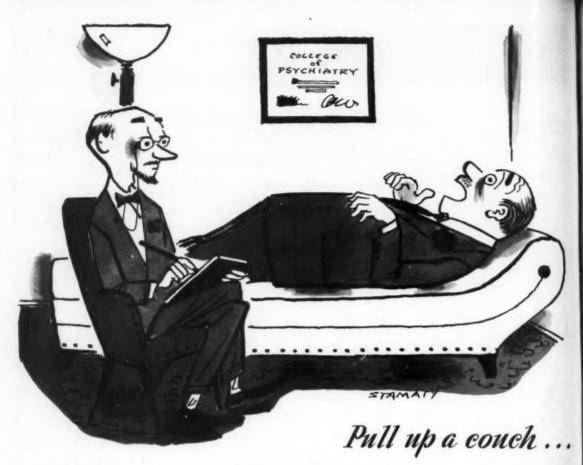
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CINCINNATI OFFICE R. J. Lantry, J. T. Allen 1816 First National Bank Bldg. We're finding a cure for lots of packaging problems these days where bleached food board is involved. It's not that we're so smart — we still have lots to learn about the amazing versatility of our new cylinder board production equipment.

But the fact is that our theory of combining short fibre hardwoods with long fibre pulps is working out to produce some truly unique benefits for established users of food boards.

This new mill has been in production only a few months. Now is the time to get in on the ground floor with your specifications for a board that can be high speed multi-color printed, that will fold and score easily and that will be rugged enough for your needs.

At this stage we promise nothing but our undivided attention to your story. If we can come up with what you want, this independent mill is in an ideal position to promise regular on schedule delivery of board under all market conditions.

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## PAPER MILLS

Crossett Co., Crossett, Arkansas

y, S. patents digest

carton blank of the type having a bottom panel, a first pair of opposite walls hingedly connected to bottom panel, each of which is formed with a lockforming cut adjacent each end thereof providing a deflectable wall portion adiacent such end.

Heat Sealer, J. F. Snyder and C. M. Carson (to The Goodyear Tire & Rubber Co., a corporation of Ohio). U.S. 2,743,761, May 1. A heat-sealing device which includes a jaw of heat-conducting metal with means for supplying heat thereto, the pressure surface of the jaw covered, at least in part, with heat-conducting resilient material which is an integral part of the jaw.

Heat-Sealing Machine, H. L. Reitzes (to Globe Products-Heat Seal Corp., a corporation of California). U.S. 2,743,762, May 1. In means for conveying in article in a given direction, a first pair of opposed transfer bars, a second pair of opposed transfer bars, means supporting the bars of each pair for longitudinal movement in one direction in engagement with each other and for movement in an opposite direction out of engagement with each other, means synchronizing pairs of bars to move oppositely each other.

Fruit Box, G. B. Brebner (to Wabash Fibre Box Co., Terre Haute, Ind.). U.S. 2,744,018, May 1. In a method of packing a fruit box having a box body, a bottomless liner therefor and a cover provided with foldable flaps along its edges, liner and cover being formed of foldable corrugated board, the steps of supporting said cover in inverted position with its flaps supported laterally to extend up to define a tray.

Process of Packaging Dried Fruit, J. E. Snyder and R. J. Swartz (to The Goodyear Tire & Rubber Co., a corporation of Ohio). U.S. 2,744,019, May 1. The process of preparing a package of dried fruit consisting essentially of the steps of preparing a bag from a web of heat-scalable thermoplastic film, processing the fruit, drying fruit and placing same in the bag and closing bag by heat sealing the mouth thereof.

Shipping Container, W. B. Crane (to Allied Plastics Co., Los Angeles, Calif.). U.S. 2,744,675, May 8. A tray-like paperboard container which is fabricated from a one-piece paperboard blank, blank being cut and creased to provide a series of integrally connected panels which form, when the container is erected, a bottom wall, side walls hinged to side edges of bottom wall and end walls extending between opposite ends of side walls.

Partition Strip Feeding Mechanism for a Partition Assembling Machine, F. Janz (to National Container Corp., New York, N.Y.). U.S. 2,744,751, May 8. In a partition strip feeding mechanism, a support, a member reciprocably mounted on support, a strip-engaging element operatively connected to member for movement therewith.





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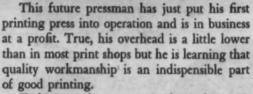
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Today, a real pressman instinctively recog-

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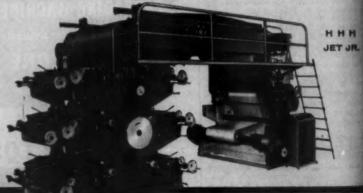
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### **Packaging decisions**

[Continued from page 78]

borne out by findings showing that three-fourths (75%) of all packaging executives reporting "feel" that a change in consumer packaging—of itself—can bring a measurable increase in sales. Three-fourths of this same group said that their companies had evidence of auch sales increases.

On being actually pinned down to the "most recent new package put on the market for an existing product," almost half of the respondents (48%) stated that sales increased after introduction of the new package; more than half (55%) said that "most" or "all" of these sales increases "were solely due to the package."

How	new	packages	outsell	old

% gain in sales	% of firms
in new packages	reporting
1 to 10%	35
11 — 20	21
21 — 30	19
31 — 40	2
41 - 50	8
61 - 70	6
91 — 100	4
201 - 500	5
	Total: 100%

#### Trends to watch

Some trends in food packaging that will bear watching were revealed in the replies which were received in response to the question: "What developments in the food and grocery industry will cause changes to be made in consumer packaging?"

Nearly a fourth (23.1%) believe that the use of "giant and larger sizes" and "multi-unit" packs will influence changes in consumer pack-

One out of seven (13.9%) feel that the desire for "more attractive packages" will cause changes in existing packages.

A trend to smaller sizes is predicted by 8.8%.

More than two-fifths (42.7%) could see no development in their division of the industry that might cause changes in consumer packaging within the immediate future—an opinion which is not borne out by the history of change over the last few years.

The logical question, of course,



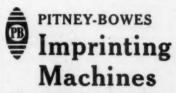
Stored Stored

An ice cream manufacturer had a large stock of unusable cartons, printed with names of flavors no longer made... Run through a Pitney-Bowes Package Imprinter, the old flavors were blocked out, new flavors printed. Saving — \$75,000! And with the Imprinter, his regular carton inventory is now reduced by \$15,000!

This amazing new machine cuts printing costs, reduces carton inventory, prints only as needed for current production, has innumerable uses — saves time and costs in any packaging operation.

The PB Package Imprinter gives a quality impression, with close register, on coated or uncoated paper, board, foil, plastic—at speeds up to 7,500 an hour. Adjustable without tools, it can be run by anybody. Flexographic ink doesn't have to be mixed, dries instantly. Prints from rubber mat or metal type, on a printing area up to 4" by 18". Handles sizes up to 18" by 18", in thicknesses from .010" to 3/16".

This versatile money-saver also imprints labels, advertising material, dealer literature, etc. Call any PB office for demonstration. Or write for free illustrated folder and case studies.



Made by the originators of the postage meter... Service from 272 cities in U.S. and Canada.

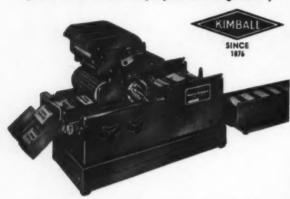
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**AUTOMATIC LABELING SYSTEM** QUICKLY PAYS ITS WAY

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imprints all types of specially designed labels, tags, tickets, when and as needed – fanfold or in rolls. Prints over 120 sizes from 1" to 6\%".

#### ROTO KIMCO

cuts off, stacks for speed in production. PRINTS from Plates -- Rubber or Metal Type.

\* CASE STUDY 28C FABRIC WEAVERS, FINISHERS

N UBLEM

SWATCH LABELS were printed and imprinted in small lots by local printer. Exact anticipated needs rarely accurate. Thus over runs and under runs and wasted lobels always existed. Optiveries of labels were necessarily slow. Costs in small quantities were expensive. PROBLEM

ROYELARS WER

ROTO KIMCO machine imprinted Fabric No., Type, Finish,
Color, Width etc. on Swatch Labels, quickly AS NEEDED in
predetermined quantities. No LABEL INVENTORY. No "guestwork" when ordering. Customer purchased designed labels
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sell your customers



keep them sold assure repeat business with

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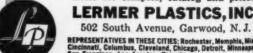


Customers are quick to appreciate the high utility value of LERMER rigid Plastic Containers. Even after the contents have been consumed, the plastic container has convenient Re-Use value, thus giving your brand constant attention for repeat business.

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- Shatterproof
- 75% lighter than glass
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JULY 15

then arises, "What does force package changes?"

Only about one-sixth (16%) of all food and grocery manufacturers stated that their newest package was adopted as a result of requests or requirements of their retailers. The great majority (75%) do not feel this to be so. The inference is that the consumer has greater weight in the mind of the food-package planner than does the retailer.

Package suppliers apparently are still designing the greatest number of packages in the food-manufacturing field. About 38% of the food packagers reporting said that their most recent packages were designed by package suppliers; 24% said they had employed independent designers, and 22% used advertising agencies for package design. Another 19% said they had their own company artists. Other sources inside the company were credited for the packaging design by 5% of the respondents.

In general, the FPBA study represents a cross-section of attitudes and practices. The results can serve as valuable tools for everyone, in all segments of packaging—design, production and sales—by providing more exact knowledge of problems and practices, and of the opportunities for more and better creative selling in food packaging.

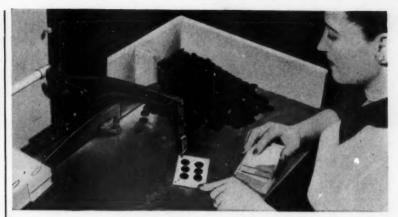
#### **Upgrading for profit**

[Continued from page 79]

attractive kinship with the Lexol package. Both retain the printed "stitch" border to simulate leather, but the G. A. 50 label is printed with a black background, instead of brown, with reverse white and brown lettering. A visual tie-up is provided by the printing of the trade name, "Lexol," on the color-applied label. A line drawing of a pair of hands in reverse white suggests the product's use.

Twelve of the polyethylene packages are housed in a convenient space-saving paperboard counter display carton of related design and color treatment.

Although it is too early to measure the sales gain, the company has been more than pleased with retailer reception of the new package. Not only are old outlets enthusiastic, but many new outlets have been won.



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The experience of this New York button-carding firm shows how stapling can slash carding costs. Products of many shapes—from small bottles to hardware

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. . . Hand, Foot-Pedal and Power Oper-ated models up to 42" long or designed for special application. CANADIAN HERMAN & LEAL, LTD. Send for FREE DESCRIPTIVE LITERATURE WEST COAST PLASTICS DISTRIBUTORS, INC. .. Vertrod PROCESSING EQUIPMENT & MACHINERY CO. THE ESTES CO., INC. 2037 Utica Avenue, Brooklyn 34, N. Y





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core cutter. Light in weight, it can be conveniently mounted on a 72" table. As no outboard support bearing is used, the 45" long mandrel will cut to the center of a 90" long core. Cut lengths up to 45" can be made. The hardened platen sleeve may be shifted as required to present four different cutting surfaces. Knife and platen sleeves can be quickly and easily replaced. John Dusenbery Co., Inc., 275 Grove Ave., Verona, N. J. Tel: CEnter 9-3900.



Reprints of articles, features and advertisements that appear in this magazine cost so little that you should really consider using them. Many companies make it a practice to have stories which have a bearing on their business reprinted for distribution to their sales staff, customers, prospects, stockholders or to other interested groups.

# make profitable use of REPRINTS

If, at any time, there is or has been something in Modern Packaging which you can use in reprint form, in quantities of 100 copies or more, write and quotations will be furnished promptly.

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The growing importance of packaging as a vital phase of the graphicarts field has prompted The American Institute of Graphic Arts to sponsor a show of packaging.

"50 Packages of the Year" will give recognition to those folding cartons and shipping containers which most successfully integrate originality of conception and excellence of execution. In a separate section, "50 Record Covers of the Year" will display outstanding graphic-arts work in that field.

Packages will be judged on excellence of design, presswork and typography; judges will not be concerned with case histories or merchandising problems.

Eligible are folding cartons and shipping containers for home consumption of mass-produced consumer merchandise manufactured in the United States or Canada between June 30, 1955, and July 1, 1956. Entries may be submitted by manufacturers, artists, designers, advertising agencies, engravers, printers, lithographers, paper and paperboard manufacturers, machinery manufacturers-all producers or sponsors of printed packages.

Entries must be postmarked not later than Aug. 15, 1956, and addressed to The Packaging Show 1956, A.I.G.A., 5 E. 40 St., New York 16, where entry forms are available on

Following are the categories set up for entries:

Hardware

Tobacco

Confections

**Bakery Products** 

Food

Soap

Cosmetic and Personal Accessories

Medicinal Products

Paraffin Cartons

Display Containers

Paper Products

Toys and Sporting Goods

Carriers

Beverages

Retail Boxes

Textiles and Wearing Apparel

Judges are Walter Landor and Will Burtin, industrial designers; Albert Kner of Container Corp. of America; Dr. Ernest Dichter of the Institute for Research in Mass Motivations, Inc., and Edgar Kaufman, formerly of the New York Museum of Modern Art.





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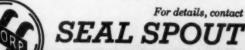
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#### **DuPont wins suit**

The United States Supreme Court last month ruled, in a four-to-three decision, that E. I. du Pont de Nemours & Co., Inc., Wilmington, Del., is not a monopoly in the cellophane industry because cellophane is competitive and interchangeable with other flexible wrappings, including glassine, Pliofilm, greaseproof paper and saran.

Cellophane "has to meet competition from other materials in every one of its uses," Justice Stanley F. Reed said for the majority. Chief Justice Earl Warren, in a minority opinion, declared that the facts of the case make it "clear" that DuPont was guilty of monopolization. Other wrapping papers have not been effective competitors of cellophane, the Chief Justice declared, and there is no room for doubt that DuPont has had the power to control the price of cellophane, he maintained.

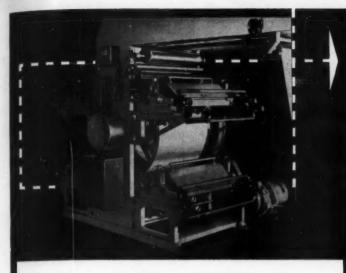
The Government brought a civil anti-trust suit against DuPont in 1947. The U. S. District Court at Wilmington dismissed the charge in December, 1953, and the Government appealed directly to the Supreme Court.

Justice Reed said cellophane accounts for 17% of the total packaging-materials market. He asserted that there is no proof that DuPont has ever had the power to exclude any of the other materials producers from the market and said the court cannot conclude that DuPont had monopoly power over prices. Justice Reed pointed out that DuPont during the years covered by the suit "produced almost 75% of the cellophane sold in the United States and cellophane constituted less than 20% of all 'flexible packaging material' sales."

The Government contended that the competition provided for cellophane by other wrapping materials is not strong enough to be considered in deciding whether DuPont has monopoly power.

Justice Reed acknowledged that cellophane "combines the desirable elements of transparency, strength and cheapness more definitely" than any of the other materials. He added, too, that "except as to permeability to gases, cellophane has no qualities that are not possessed by a number of other materials."

But, he said, cellophane furnishes



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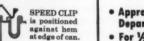
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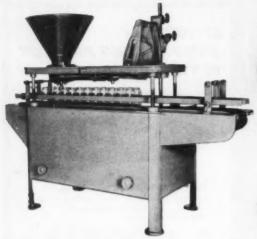
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less than 7% of the wrappings for bakery products, 25% for candy, 32% for snacks, 35% for meats and poultry, 27% for crackers and biscuits, 47% for fresh produce and 34% for frozen foods. He noted that 75 to 80% of all cigarette packages are overwrapped in cellophane,

#### Research on metal

Continental Can Co. has brought its metal research and development activities together in a new \$7 million laboratory and engineering center. Located at 76 St. and Loomis Blvd. in south Chicago, the center—said to be the largest and most advanced under one roof in the can-making industry—will employ 600 people, including 265 scientists and engineers.

The center will service the company's 41 plants in the metal division and is designed to meet the company's research needs for the next 25 years.

In dedicating the center, T. C. Fogarty, Continental president, said, "Research is our password to new markets." Research, he speculated, could double the industry's output of metal containers in five years. (That would mean about 78 billion metal containers by 1960.)

Among the features of the new center are a modern 6,000-volume library, complete pilot areas for can-making and can-closing equipment, advanced chemical, physical and microbiological laboratories. There is also equipment for designing, producing and testing machines. The laboratory is complete to an ultra-modern test kitchen and facilities for a taste panel.

Lenvik Ylvisaker, general manager of the metal division research and development department, is in charge of the development program in Chicago. In describing some of the facilities and activities of the center, he mentioned can processing from coil steel: investigation of alternate materials and blends of materials; further work in connection with the welded can and similar processes designed to free the industry from dependence on tin. Mr. Ylvisaker described work done with high speed photography and similar approaches contributing significantly to the production of a stronger, lighter metal can.

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910 West Van Buren Street CHICAGO 7, ILLINOIS TAylor 9-5400



#### THE MAN FROM MARATHON knows what sells frozen foods





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Backing him are the contributions of Marathon artists, engineers, production and research men—Marathon's more than 25 years' experience in food packaging.



He recommends the right packaging to speed production - no matter how you package: hand-fill, semi- or fully automatic.



Marathon helps ring up sales for you at the check-out counter by giving you packaging that cuts costs, personalizes your brand.

What are the factors that influence shoppers to choose one package rather than another? The Man from Marathon finds the answers by checking shopper habits regularly at point of sale. He devotes 100% of his time to the frozen foods industry.

WHATEVER FOODS YOU PACKAGE ... THERE'S A MAN FROM MARATHON TO HELP YOU!

Only Marathon has a separate sales force for each major specialists giving ALL their time to YOUR field. Write Marathon Corporation, Dept. 322, Menasha, Wis.

#### food industry. Only at Marathon will you find packaging MARATHON MPACKAGES

SELL BRANDS - PROTECT PRODUCTS - SPEED PRODUCTION









WHATEVER FROZEN FOODS YOU PACKAGE . . . SEE THE MAN FROM MARATHON!

#### **Auto supplies—an Industry Survey**

[Continued from page 87]

set-up boxes for license-plate holders.

Hull Mfg. Co. Auto compasses in die-cut slanted platforms, topped by heavy-gauge transparent acetate plastic covers.

Chicago Rawhide Mfg. Co. Welldesigned family of 10 cartons for various sizes of oil seals.

Tempo Products Co. "Touch-up" enamel in metal aerosol containers with caps duplicating paint colors, in a counter display carton.

The Weatherhead Co. Display cabinet for small parts made up of 192 separate drawers of transparent polystyrene.

Electric Auto-Lite Co. Service parts for storage batteries in hangup dispensing cartons.

Ford Motor Co. Oil-filter elements packed in round fibre canisters with draw-string opener: spark plugs, condensers and distributor points in transparent-wrapped paperboard trays.

Sears, Roebuck & Co. Spark plugs

in triangular acetate tubes, displayed in fed-from-the-rear dispensing rack; distributor tune-up kits under formed plastic "blisters."

Houser Engineering & Mfg., Inc. Safety door locks on cards with special slide-out trays.

The Greenfield Co. Auto seat belts coiled up and packed under large formed plastic "blisters" on display card.

Wooster Rubber Co. Bright-colored folding cartons for rubber car rugs, with small die-cut windows to show product.

These items—and many others which also could be mentioned—make the most of what packaging can do to display automotive supplies in today's changing consumer market.

They can serve as guideposts to other companies in this field—and to all other packagers for whom the rigid demands of self service are just now making their presence known.

#### How to manage a family of packages

[Continued from page 108]

"Fil" seemed so appropriate that it was decided to let it dominate the label. Yet with similarity of color and handling of design, this departure does not destroy a close resemblance to the rest of the product packages in the line.

To give more self-selling punch to the line, sales messages were pared down to the few words most likely to catch the shopper's eye.

"House Paint" needs no explanation for use, but prefixing it with "Brilliant White," it was felt, adds "sell" to the label.

The principal use of a product called "Mex" is to renew floors. The brevity of "Makes floors new" results in excellent display of product use and permits emphasis on the key word, floors.

A similar effect also has been achieved by "Ejecto—opens clogged drains" and "Fil—fills cracks."

#### Results

It is never possible, says the company, to figure with accuracy the sales increase that can be credited to improved packaging. Always mixed in the picture are selling, advertising, improved and new products, changing consumer preferences and the over-all state of business.

However, since this new packaging program has been in effect, the sales curve, reportedly, has turned up remarkably, and it is felt by the company that the results of the new packaging can be stated broadly as follows:

- 1. A general increase in sales of most products.
- 2. Increases on individual products ranging from 50% to as high as 300% in a few cases.
- 3. New product successes (with no basis of comparison) exceeding expectations.
- Wider stocking of U-G-L products by many dealers who carried only a few before.

A further benefit is the improved appearance of the packages when reproduced in direct-mail advertising.

The new packages have also provided the basis for a streamlined, colorful catalog—something not previously possible to achieve.

## It will pay you to talk to the

#### MAN FROM MARATHON



#### ... no matter what you package and sell

Every Man from Marathon (nearly 200 of them) specializes in a single line of products. While the Man from Marathon on the facing page, for example, devotes all his time to frozen foods, others work only on baked foods, meat and dairy products. In addition, a group of Men from Marathon spends full time on fresh fruits and vegetables, tobacco, sugar and many other products.

Every Man from Marathon draws freely on Marathon's 45 years of experience in making packages that make sales. Call any Marathon sales office (in all major cities) for the free packaging counsel of the Man from Marathon who knows your field. Or write directly to Marathon Corporation, Menasha, Wis.



#### MARATHON PACKAGES

Menasha, Wisconsin

In Canada: Marathon Packages Limited, Toronto



#### Canco to process steel

The American Can Co. plans to spend \$27,000,000 within the next two years to set up facilities to process most of its own steel rather than have steel companies do this "at their cost, plus a profit."

William C. Stolk, Canco president, said the new program is designed to combat the apparently endless upward spiral in the cost of precut tin and steel plate. He also indicated this "drastic change" was directly in line with his company's pursuit of tinless cans.

Canco's plans involve a \$7,000,000 processing plant in the Chicago area; a \$5,000,000 processing plant at Hillside, N. J.; installation of new processing facilities at Oakland, Calif., and Tampa, Fla.; and some additional units at Los Angeles, Baltimore and in Texas. Mr. Stolk predicted the Chicago plant should be completed next spring; the Hillside one late in 1957.

New facilities will consist essentially of shearing lines for inspection and chemical or enamel treatment of huge coils of steel and cutting the coils into sheets. Canco will not take on tinplating, but will perform most of the other work formerly done by steel companies.

A major problem, according to Mr. Stolk, has been the inability because of competition to pass on all the increases in the cost of pre-cut steel plate. Canco buys more than \$400,000,000 worth of steel plate a year. By doing some of the processing itself, Canco hopes to cut costs and "keep the vise from getting worse."

Mr. Stolk charged that the steel industry "apparently fails to realize that its basic material is in the strongest sort of competition with many other types of packaging materials," including paper, plastics and aluminum. Mr. Stolk believes that the steel industry is "generally very pleased that we're doing this—it relieves them of some of the responsibility of selecting and sorting." The \$27,000,000 program, Mr. Stolk pointed out, will not involve any new financing.

At present, about 15% of Canco's output of 1.5 billion cans a month are "tinless" cans. The search for a tin substitute for metal containers began in earnest about six years ago, when the industry woke up to the fact that the major sources of tin

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of ch Ti are running short and are in precarious geographical locations. With 12 months' notice, Mr. Stolk said, Canco could convert to tinless containers for about 70% of its production.

#### Cellophane tester

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[Continued from page 125]

and/or gram weight, within the range of a given gauge of cellophane, can be eliminated as a decisive factor in the stretch or pliability.

Pliability tests were also conducted on samples printed at various speeds and temperatures with an "as received" basis sample for control. Samples of cellophane from each phase of this test were submitted to our Physical Testing Section for an analysis as outlined.

This phase of testing was accomplished by running film on press at various temperatures, holding press speed constant at 100 ft. per minute, then 200 ft. per minute and, finally, 300 ft. per minute. Samples for laboratory analysis and pliability tests were taken. This material was then conditioned on the Avisco conditioner at 180 ft. per minute with steam-gauge pressure of 5 lbs. per square inch. Results from the tests on the conditioned samples correlated, within the preceding limits as outlined, with the moisture analysis as received from the Physical Testing Section.

This test substantiates results obtained in previous tests and indicates that the Avisco cellophane-pliability tester will perform the functions for which it was primarily designed, namely, to indicate loss of moisture in cellophane in the printing operation and moisture pick-up when the cellophane is reconditioned.

ADDITIONAL EXHIBITORS: The exposition management's alphabetical listing of exhibitors on the Western Packaging and Materials Handling Exposition in Los Angeles, carried on p. 145 of the June issue, failed to show that booths 523, 525 and 529, listed under the name of Simplex Packaging Machinery, Inc., will be shared jointly with Miller Wrapping & Sealing Machine Co. of Chicago and Amsco Packaging Machinery, Inc., of Long Island City, N. Y. This is a joint display of the three companies.

#### Something Really **NEW**

DOUBLE FOLDS

and GLUES

OR

DOUBLE FOLDS

HEAT SEALS

OR

DOUBLE FOLDS.

HEAT SEALS

and GLUFS

#### in a Paper Bag Closing Machine

FRY CONTINUOUS-MOTION

Bag Closing Machine (MODEL 65 54)



Makes strong, sift-proof closures. Other models available. Send for descriptive literature

GEORGE H. FRY COMPANY

Save on labelling...on package costs...on storage space
PRINT YOUR "LABEL" RIGHT ON THE PACKAGE

with this production-line imprinting machine



Prints anything, from code-date to ad...
on any package, from tiny carton to shipping case

Are you using fully preprinted packages for every different product in your line? Are you using labels on your package. or imprinting it in a separate operation? You can save money by using a Gottscho MARKOPRINTER machine to imprint contents descriptions, parts numbers, varieties, codes, flavors, other changeable legends on one or more blank panels of a common

container... automatically ... as part of your packaging operation. The MARKO-PRINTER machine does away with label and labelling costs, huge inventories of preprinted packages, losses from obsolescence... assures lower unit package costs, reduced warehousing and record-keeping labor, no down-time due to lack of right packages at the right time.

Write for descriptive Bulletin "MP"

Gottscho

ADOLPH GOTTSCHO, INC.

Dept. A , Hillside 5, N. J.

In Canada: RICHARDSON AGENCIES, LTD., Toronto & Montreal

Automatic Production-Line CODING, MARKING IMPRINTING MACHINES



66

It's time <u>now</u> to order space in the coming Modern Packaging Encyclopedia Issue.

It will be issued in November to the full record-breaking paid circulation of the magazine.

Mail your order or write for details
to the Advertising Department of
Modern Packaging, 575 Madison Avenue,
New York 22, N.Y.

Closing date is August 2nd, so do it now! 99





The two great pyramids of Cheops and Khafra, Giza, Egypt.

#### **L**ong-Lasting Impressions

More and more packaging men are discovering that Steel Engraved Cylinders give them the printed package they are looking for. Converters are impressed with the way they out-last all other printing techniques, the fact that every impression is as perfect as the first, plus the many other quality and durability factors inherent in chrome-plated steel.

- Greater Print Clarity For More Perfect Packages.
- Faultless Color Registration.
- Chrome Plated Steel Cylinders In Any Size Up To 36" Long.
- Patterned Glue Rollers That Assure Stronger Grip.

Make your next impression a permanent one—make it a steel engraved cylinder by Vitra-Tone. Write today for prices and details.



#### **PMMI** exposition

Action exhibits of actual packaging operations on display at the forthcoming Packaging Machinery and Materials Exposition, to be held Sept. 11-14 at the Public Auditorium in Cleveland, will demonstrate how packaging machinery operates, how materials are used and the removal of the finished packaged product from the production line.

The show, sponsored by The Packaging Machinery Mfrs. Institute, will feature a Government packaging exhibit and educational exhibits, in addition to industrial exhibits. Some 50,000 sq. ft. of exhibition space will be occupied by exhibitors' booths, which will be manned by engineers and technical personnel so that visitors can get onthe-spot answers to their packaging questions.

Tom Miller, president of the Institute states that customers will be able to bring packaging problems of any type—selection of machinery and materials, package design, controlled filling, adhesives, labeling, inks and marking, costs—and find the answers which will help them when they return home.

Cleveland has also been selected as the site for the Packaging Institute's 18th Annual Forum, which will be held at the Hotel Statler Sept. 10-12.

The decision to hold the annual PI Forum outside of New York for the first time was influenced by two major factors of long standing: To relieve the eventual designation of the event as "Eastern Seaboard Packaging Forum" and to make attendance at this technically valuable Forum available to another large technical and scientific packaging personnel area.

Dates selected for the Forum will make attendance at two events—the Forum and the PMMI exposition realistically practical.

The first day's speakers at the PI Forum will offer practical approaches to the protection of packaged products against wasted dollars due to failures in these four major problem areas: (1) Mechanical problems, caused by impact damage during production, handling or shipping; (2) Biotic problems, caused by mold or bacteria whether apparent or not; (3) Chemical problems, caused by reaction between the pack-

#### Glamour attracts attention!



• • • and you can attract attention to your food product by giving it the glamour of a full-color wrapper featuring Taste Excitement! Taste Excitement is the properly balanced use of color, brand identification and mouthwatering, full-color serving suggestions. It gives familiar, everyday food products a "package personality" that stands out and sells on supermarket shelves.

But modern package design is a science that requires highly specialized knowledge and experience. Call on us to put the sales-boosting glamour of *Taste Excitement* on package designs for your food products.

Increased Sales ... by Design!



CROWN ZELLERBACH . WESTERN WAXED PAPER DIVISION WAXIDE PAPER COMPANY DIVISION

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JULY 1

age materials and the product or products; (4) Climatic problems, caused by conditions involving temperatures, water vapor or moisture.

Intensive full-day specialized sessions on the second day will include the Drug and Pharmaceutical Seminar, the Food Packaging Seminar, Flexible Packaging Seminar and Printed Packaging Materials Seminar. The third day's program will feature a combined Production Line-Packaging Machinery Seminar and during the afternoon, a complete program of planned "open meetings" will offer those in attendance an opportunity to observe some of the operations of the Packaging Institute's more than 20 technical committees.

#### **Breaking up mixes**

[Continued from page 93]

can of blueberries.

(3) A set of 10 parchment muffin

Since the blueberries need more protection than other ingredients, they are packed separately. The mufin cups are typical of the inexpensive "extras" many manufacturers now hand out to their customers as a bonus.

#### Popular old-timer

Betty Crocker Angel Food Mix by General Mills, Inc., contains:

(1) A laminated glassine carton liner of powdered egg whites, sealed into a small paperboard folding carton, on the outside of which are printed directions for use.

(2) A similar liner and carton, about twice as large, for the other introdients.

These two small cartons are not enclosed in an outer carton—as the other mixes described on these pages have been—but are bundled together in a printed paper overwrap, giving the appearance of a single carton.

Angel-food cake mixes were among the first of these products to utilize separate packaging for component parts. Only when this procedure was followed could the proper separate protection be given to the dozen of egg whites needed to produce an angel-food cake. The variety illustrated, General Mills' Confetti Cherry Almond cake, is one of the newest on the market.





fect for the beach, for travel, for shopping. Odorless, alcohol and perfume proof. Easily cleaned in hot

Send for Re-Use Packaging

Catalog M-2 for many diverse packaging containers such as cosmetic kits, jewel boxes, candy dishes, handbags, etc. 83 VALLEY STREET, BELLEVILLE 9, NEW JERSEY

PHONE-PLYMOUTH 9-6150

without polyethylene squeeze bottles.

PLASTIC JEWEL CO., INC.

## Don't take chances with food wrappers

# play safe with NON-TOXIC Patapar

When selecting a packaging material that is to come in direct contact with food, make sure it has no impurities that might be imparted to the food. Even a faint trace of toxicity in a wrapper can cause consumer dissatisfaction.

You can have utmost confidence in NON-TOXIC Patapar Vegetable Parchment. This wet-strength, grease-resisting paper is made from pure cellulose. It contains no resins or sizings. There is nothing to impart "off" flavor.

Patapar is the perfect wrapper for protecting butter, cheese, poultry, ham, sausage, bacon, margarine, shortening, ice cream and many other foods.

Patapar is furnished in sheets or rolls, plain or

colorfully printed with nontoxic inks. If you would like samples for testing, write telling us your requirements.

Send for new booklet describing special types of Patapar for industrial and business uses.



#### Polyethylene bead seal

A new molten bead-sealing principle developed by Bakelite Co., a Div. of Union Carbide & Carbon Corp., New York, makes possible a continuous seal for polyethylene film produced



at rates of 500 ft. per minute or higher. Conventional methods that seal 1½-mil polyethylene films at 150 ft. per minute apply heat from the outside.

The new principle extrudes a hot filament of polyethylene between two layers of film at the point where they are to be sealed rather than attempting to drive the heat through the films.

The first bead sealer developed at Bakelite's Packaging Laboratory in Bound Brook, N. J., employs a plastics extruder with a 3/4-in.-diameter bore and a 1/16-in.-diameter die opening to produce the continuous molten bead. The resin is heated in the extruder to approximately 250 deg. C. and forced out at the rate of about 11/2 lbs. per hour. The molten bead is fed between continuously moving lengths of traveling film. Just enough pressure to flatten out the molten bead between the two films is applied to rollers through which the film passes after picking up the

A patent has been applied for the new technique, which may be used to seal film of almost any thickness and is applicable to sealing polyethylene-coated paper, polyethylene laminates and paper.

CORRECTION: The paperboard carton for the Wilson golf-ball package illustrated in Modern Packaging, April, 1956, p. 109, is made by Container Corp. of America, 38 S. Dearborn St., Chicago 3. Frederick A. Krause Associates, Inc., Frenchtown, N. J., makes the wrought-iron holder.



## HOW New Container

raised sales 25% to 100%! To increase his sales in today's highly,

competitive market, a large fish stick processor wanted to offer a "built-in" packaging advantage for the consumers' convenience. So he called in Ekco-Alcoa Containers Inc.

After many experiments, our food technologists suggested a ridged bottom container.\* The fish sticks, resting cross-wise on the ridges, brown on both sides at once, without turning. No transfer, no pans to wash, just heat and serve in the same container.

A new and ingenious die design by Ekco-Alcoa Containers made this ridged bottom container possible and practical.

The sales results: in side by side tests, without any promotion, the fish sticks in ridged aluminum foil packages by Ekco-Alcoa Containers outsold the processor's indentical product in conventional wax-wrapped cartons; raised sales from 25% to 100%!

For a sales-making package for your product, call Ekco-Alcoa Containers Inc.
Choose from the largest line of stock rigid aluminum foil containers, or
have a package engineered to fit your particular needs.

\*\*Patent Pending\*\*



#### EKCO-ALCOA CONTAINERS Inc.

Wheeling, Illinois

EKCO is the registered trademark of Ekco Products Company, ALCOA is the registered trademark of Aluminum Company of America. The corporate name and combination mark, EKCO-ALCOA, is used under license to the manufacturer by each of these companies.



#### Moisture-proof

Deep-drawn transparent packages made from

#### GENOTHERM

Rigid containers — round, oblong, oval, square or cylindrical — suitable for the packing of all kinds of food,



the rigid PVC foil entirely free of plasticiser and consequently physiologically unobjectionable and officially approved for packaging foodstuffs.



the special type of PVC foil with excellent deepdrawing qualities for vacuum-forming, blow-forming, and plug-forming.



the rigid PVC foil with an exceptional tensile strength, practically moisture proof, unaffected by temperatures up to 176° F and with good transparency.

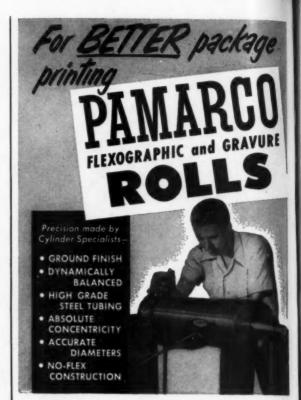


the rigid PVC foil is available colorless and in colored finishes, opaque or transparent and in all widths up to 32".

#### ANORGANA G.M.B.H - MUNCHEN - GERMANY

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#### • FLEXOGRAPHIC PLATE ROLLS

Can't flex or whip, assure perfect impressions on every run. Tubular construction reduces weight, tests stronger than solid steel. Ground finish to exact specifications.

#### GRAVURE BASE CYLINDERS

PLAIN OR COPPER PLATED — Accurate core or base cylinders for rotogravure process reproduction. Recommended for long service in continuous printing production. Each roll carefully inspected prior to shipment.

#### • EVENFLO ENGRAVED ROLLS



Precision engraved rolls for the metered application of inks, plastics, adhesives, hot melts and other fluids. Call or write for complete information on economical Pamarco rolls!

## PAPER MACHINERY & RESEARCH · INC

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Specify PAMARCO
for all Roll requirements

BULAR ROLLS WARM SURFACE ROLLS

AVY DUTY ROLLS RUBBER COVERED ROLLS

HT DUTY ROLLS ENGRAVED ROLLS

ENGRAVED ROLLS
EMBOSSING ROLLS
ROME PLATED ROLLS

#### CHROME

Highest quali workmanship A work performed our own mode plating departmen

#### STEEL

Pamarco precision cut gears insure accurate register Specify them when ordering rolls.

#### Packages that function

[Continued from page 81]

New York. It is a composite, perforated fibre canister for Plantrons concentrated, multi-purpose fertilizer beads.

This package is designed to dispense the tiny beads evenly in much the same manner as a paint roller applies paint. The fertilizer is packed in a metal-ended cylinder which comes with a metal handle, the ends of which fit into small holes in the two ends of the cylinder, after their pressure-sensitive-tape coverings have been removed.

The next step is to remove the outer wrap-around printed label, which is stapled around the cylinder of fertilizer. This exposes the perforations in the walls of the canister and the roller may then be pushed as if it were a lawn mower, with the fertilizer feeding out evenly in proper amounts. If all the contents are not used in one application, the label, which is made from heavy fibreboard, may be replaced and the canister may be stored in a cool, dry place.

Two sizes of Roto-Spreader are now available in nurseries, department and hardware stores and supermarkets. A 10-lb. container, priced at \$5.85, is said to hold enough Plantrons to fertilize a 2,000-sq.-ft. lawn; a 25-lb. size costs \$10.75 and its contents will cover a 5,000-sq.-ft. area of grass.

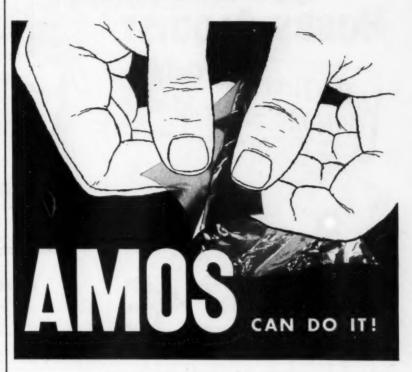
#### Box-Mix

Serving an entirely different purpose from these first two innovations—but inspired by the same trend toward complete, functional packaging—is the new container used by Box-Mix Corp., Norfolk, Va.

Made from 200-lb-test corrugated and paraffin coated on the inside, this carton is used to package 10 of the company's mix products, such as concrete, cement, mortar, plaster, stucco and cement masonry paint, in small unit sizes for home use. Sides of the containers are tapered to permit nesting and an inverted tray lid is stitched inside the top flanges of the box to make the closed container siftproof and to enable the user to cut out the lid without damaging the container.

Directions on the outside panel of this lid, illustrated with line sketches, show how the contents can

### Poly-Coated Packages • Laminates ... Whatever Your Need!



Your complete source for any kind of volume polyethylene packaging is Amos. Nothing has been spared to equip a new million dollar plant with every facility. Amos extrudes its own polyethylene—maintains quality control from start to finish.

This means just one responsibility... from design to delivery. Each Amos sales engineer can advise you on the best way to package—flexible or rigid. Take advantage of his experience... have him call before your next job comes up. Write today.

#### YOUR NEWEST SOURCE FOR THE WHOLE JOB —FROM PLASTIC RESIN TO PRINTED PACKAGE

Packaging Specialists—experienced staff for production, development and sales.

Extrusion, Coating, Laminating
—polyethylene film and combinations with foil • "mylar" • cellophane
• glassine • papers.

Complete Production—Rolls • Sheets • Bags • Pouches . . . all in one completely new plant.

6-Color Printing—latest equipment using flexographic process.

Package Design—by experienced AMOS designers.

Packaging Laboratory—testing, design and development for all flexible and rigid packaging.



Polyethylene Film Extrusion • Coating • Laminating • Rolls • Sheets • Bags • Pouches
DIVISION OF AMOS-THOMPSON CORPORATION • EDINBURG, INDIANA

#### Type WS **HOBBS-ALQUIST**



#### For use with take-ups behind film extruders, where low and constant tensions at low speeds are required.

If you wish to protect YOUR extruded film from breakage and distortion; if you wish to do it by a comparatively simple, positive and economical method, here's the machine you need.

Never before has a winder like this been available for extruded use . . . although new, the WS Hobbs-Alquist unit has been fully tested.

You can eliminate distortion of tender, delicate materials when winding after extruding . . . you can maintain constant tension at ridiculously low speeds. Variable speeds can be manually adjusted for changing widths.

So . . . you get constant tension at lower speeds than ever before, variable speed control and tarque control all in one winder

The operating speed of the WS Winder is automatically adjusted downward, as the roll builds up and the torque increases. Thus a low and constant tension on the extruded film is maintained and breakage and distortion are minimized or eliminated.

> Take the first step NOW toward protecting your extruded film. Send for our "Type WS Data Sheet".



Branch Offices & Representatives in Irvington, N. J., Chicago, Cleveland, Greenville, S. C. and Toronto, Canada

WINDERS • SHEARS (Hand & Automatic) • DIE PRESSES SLITTERS . CORNER CUTTERS



This small stitching machine allows for closures in seconds, both for paper bags and jute bags. It is used in 33 countries.

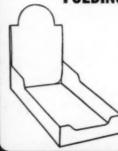
#### THIMONNIER & CO.

CONSTRUCTEURS

85F, rue de Bourgogne. Lyon (France)



#### **FOLDING BOXES**



Consolidated Box is your most dependable source of supply for all types of folding boxes. Compare . . . and you'll choose Consolidated!

#### SET-UP BOXES



Consolidated set-up boxes, your guar. antee strength economy and attractiveness.

#### TUBES AND CANS



Choose Consolid ated tubes and paper per cans. Available either plain or printed.

Dealer Inquiries Invited

CONSOLIDATED BOX CO. PACKWOOD AVE. TAMPA.

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MODERN PACKAGING

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be used. For most of the products, water is added to the mix while it is still in the box, after which the two can be mixed together with a hoe. The novel box may also be used as a mold for making concrete slabs, stepping stones, etc.

#### Use of antioxidants

[Continued from page 123]

ition at the dry end of the machine has been found to give excellent retention. It has been shown that losses encountered when addition is made prior to the drying stage are due to a steam distillation of the antioxidant from the paper rather than to a true volatilization.

The loss of antioxidant from treated papers which have been repeatedly cycled from high to low humidities can be markedly minimized by incorporation of the antioxidant as a solution in an inert, high-boiling solvent such as mineral oil. Such a solvent-Ionol CP system also aids emulsification and addition of the antioxidant.

Organoleptic tests on laboratory hand sheets and paperboard prepared on mill scale show that incorporation of Ionol CP in the paper markedly retards the rancidification of fats which have migrated into the paper. Concentrations as low as 0.1% Ionol CP gave noticeable improvement; increases in this concentration resulted in increased protection.

#### Acknowledgements

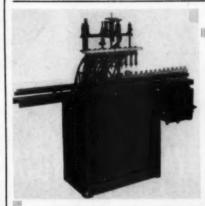
The authors wish to express their appreciation to T. F. Mika for his many valuable suggestions and to Drs. C. D. Wagner and W. Harp, Jr., for their assistance with the radioactive measurements and the spectroscopic analyses.

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#### Twin-tube adhesive

[Continued from page 83]

versatility: it can be used to fasten metal, glass, wood, masonry or any other material to similar or dissimilar surfaces. The manufacturer is particularly recommending it for repairing furniture and bonding metal to glass.

Both tubes are formed and filled automatically at high speeds by the contract packager that first developed them. The small inner tubes are produced from continuous rolls of seamless saran tubing, which is cut in short lengths of slightly less than 2 in. A solid heat seal is formed at the bottom of each length, an accurately measured dose of catalyst is injected into it and the patented dispenser end is formed. This consists of a narrow-channeled opening that is lightly sealed with a special compound-strong enough to hold the contents in place, yet weak enough to yield to the right amount of finger pressure and expel the hardener.

The outer tube is slightly different in construction. When filled, it measures about 4 in. in length and 3/4 in. in width. The contract packager uses pre-cut lengths of saran tubing, with one end cut on a slant, the other straight across. Imprinted on each length is the brand name, "Fix-Mix," in red letters.

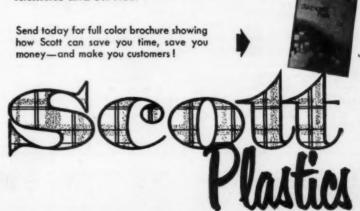
In the filling operation, the slanted ends are heat sealed first, using special die welds, and then the filled inner tubes are inserted. Next, the tubes are filled with epoxy resin and then the straight ends are sealed shut.

American Metaseal inserts each tube under a die-cut band on a simple fold-over card, on the inside of which are printed instructions for mixing and applying the adhesive. Priced at three for \$1, the unique tubes are being sold in hardware and novelty stores.

CLARIFICATION: The National Paper Box Mfrs. Assn., in reporting the award winners in its 1956 Sixth Annual Set-Up Paper Box Competition, identified the Sirocco perfume box, winner of the Best Transparent Box Award, as a Coty, Inc., product. Modern Packac-Inc (Winning Set-Up Boxes," May, 1956, p. 140) so identified the package. Actually, the Sirocco fragrance is a Lucien Lelong product.



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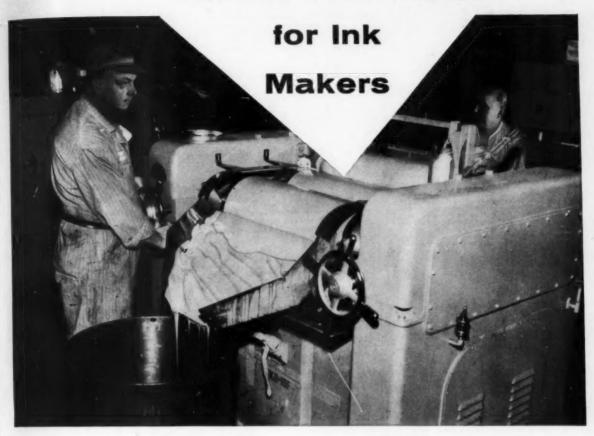
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(Continued on page 200)

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(Continued from page 198)

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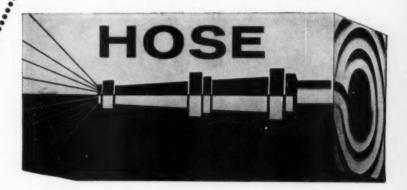
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